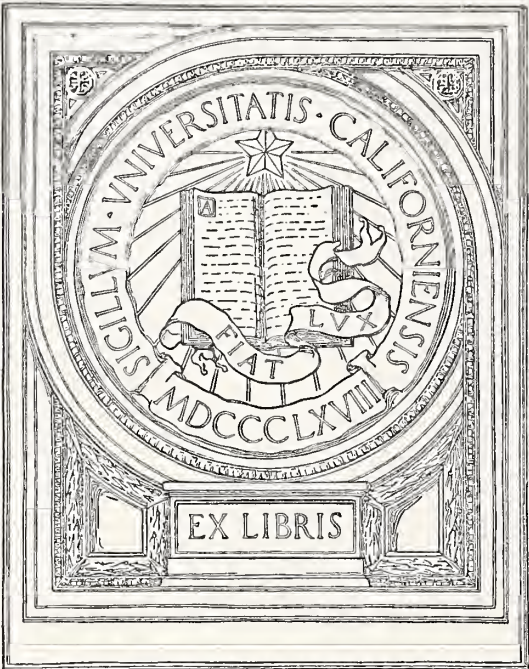


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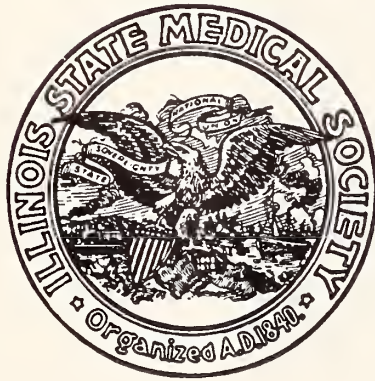


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The Illinois Medical Journal

The Official Journal Of

The Illinois State Medical Society



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January — June, 1948

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The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

**EDITOR — Harold M. Camp. EDITORIAL BOARD — James H. Hutton, Chairman,
Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher,
Harry Culver, Walter Stevenson, Raymond W. McNealy.**

Vol. 95, No. 1



January, 1949

ASSESSMENT TO PROVIDE EDUCATIONAL PROGRAM

The House of Delegates, at the recent St. Louis Interim Session of the American Medical Association, unanimously voted to assess each member of the Association \$25.00. Although the by-laws of the A. M. A. provide that an assessment may be made against the membership up to \$25.00, this is the first time any action of this type has been taken.

In the past there have actually been no dues assessed against members of the A. M. A. Fellowship dues have been \$12.00 for the Journal of the American Medical Association, which is the regular cost of the Journal to non-members.

The fund to be provided by this assessment will be used for a nationwide plan of education on the progress of American Medicine, the importance of the conservation of health and the advantages of the American system in securing a wide distribution of a high quality of medical care.

The assessment will come to the members through the state and county societies. The county societies in Illinois will be expected to collect this assessment, and refer it to the office of the state medical society, which will make the proper reports to the American Medical Association. All county society secretaries will have received this information prior to the publication of this announcement.

THE ST. LOUIS INTERIM SESSION

The St. Louis Interim Session of the A. M. A. held November 30-December 3, was one of the most interesting sessions yet held. The attendance was excellent, the programs well arranged and the House of Delegates had one of the busiest sessions of all times. The overall registration was 4,526, and there were approximately 2,200 Fellows of the A. M. A. present.

This meeting once more demonstrated the necessity of having two meetings of the House of Delegates each year, and it was obvious that there were many important matters placed before this group, and as usual, a most serious consideration was given to each item on the agenda.

The scientific programs were arranged especially to appeal to the general practitioners and they were all well received. Once more the value of television at medical meetings was well demonstrated. Clinics were brought from several hospitals and medical schools in St. Louis to the auditorium, through the courtesy of E. R. Squibb & Sons.

The technical exhibits were extensive, as is always the case at the meetings of the A. M. A. and likewise the scientific exhibits were both numerous and highly interesting. With all sessions held in the large auditorium, the exhibitors were well pleased with the attention given.

Several important meetings were held during, or prior to the opening of the session on November 30. The Annual Conference of State Medical Society Secretaries and Editors was held November 28, 29, with an excellent program which was well received. The Grass Roots Conference was likewise well arranged and an excellent attendance was on hand.

The Public Relations Conference was held on November 27, and was well attended by officers of state and county medical societies, as well as many of their medical public relations consultants.

Many important actions were taken by the House of Delegates during the two day session, and already many repercussions have been widely disseminated through the press and in many official circles throughout the nation. Some of these actions will be referred to elsewhere in this issue of the Illinois Medical Journal, and will likewise be transmitted to the component societies throughout Illinois.

St. Louis once more proved to be a perfect host city, and went all out to make the meeting a highly successful one. They are fortunate indeed to have their fine auditorium available for meetings of this type, and it is possible to have all meetings and exhibits under one roof.

Once more the need for the annual Interim Session is well demonstrated by this highly successful meeting held in St. Louis.

RURAL HEALTH CONFERENCES

The Committee on Rural Medical Service of which Dr. Harlan English, Danville, Illinois, is chairman, has arranged two interesting Rural Health Conferences to be held at the Emmerson Hotel, Mt. Vernon, on January 20, and The Pere Marquette Hotel, Peoria, on January 21, 1949. The Conferences are primarily for rural people, and invitations have been sent to the heads of the farm and home bureaus, the farm and home advisors, 4-H health committee chairmen, and chairmen of county boards of supervisors.

Other interested persons will be permitted to attend the conferences but they are asked to make reservations for the luncheon, which will be served with the Illinois State Medical Society as host. The conferences are planned to show what medicine and the public have done to improve health conditions in Illinois, and what may be expected in the future with all interested groups working together with the common objective of health improvement in mind.

The discussion groups will meet individually, then at the end of the afternoon program, all meet together in the ball room of the respective hotels and a summary will be given from each of the panels, through a moderator. Time will be made available for question and answer periods. These conferences should be highly interesting, and from information available at this time, the attendance at both of the conferences should be excellent, indeed.

The programs are as follows;

MOUNT VERNON CONFERENCE

January 20, 1949

I

"Tuberculosis, What Can Be Done About It and What It Costs"

by

Mr. Robert Kinningham, Illinois Tuberculosis Association, Exec. Sec'y.

ILLINOIS STATE MEDICAL SOCIETY

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Send advertising copy, and all communications relating to advertising to ILLINOIS MEDICAL JOURNAL, 30 N. Michigan Avenue, Chicago.

Original articles and membership correspondence to Dr. Harold M. Camp, Monmouth, Ill.

Society proceedings and news items and changes in the mailing list to Managing Editor, 30 N. Michigan Ave., Chicago 2, Illinois.

Subscription price of this JOURNAL to persons not members of the Illinois State Medical Society is \$3.00 per year, in advance, postage prepaid, for the United States, Cuba, Puerto Rico, Philippine Islands, Hawaiian Islands and Mexico. \$4.00 per year for all foreign countries included in the postal union. Canada, \$3.50. Single current copies, 50 cents. By mail, 60 cents.

Dr. A. T. Cole, Clinical Director of Outlook Sanatorium, Champaign, Ill.
Dr. Clifton Hall, Department of Health, State of Illinois

II

"The Hospital Construction Act, Why and Where the Locations of Hospitals"

by

Dr. Roland R. Cross, Director of the Department of Public Health and Associates

III

"The Opportunities in Medicine and the Professions Allied With Medicine"

by

Harry M. Hedge, M.D., Chairman of the Council
Leonard J. Murphy, M.D., Director of Murphy Laboratories, Chicago.

Mrs. Mary Falk Bleeker, R.N., assistant executive secretary, Illinois State Nurses Association

IV

"The Compulsory Health Insurance, What It Costs and What You'll Get"

by

Ralph Blodgett, Professor of Economics, University of Illinois

Harlan English, M.D., Chairman, Rural Medical Service, State Medical Society

John W. Neal, Attorney, Chicago, Illinois

PEORIA CONFERENCE

January 21, 1949

I

"Tuberculosis, What Can Be Done About It and What It Costs"

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Dr. A. T. Cole, Clinical Director of Outlook Sanatorium, Champaign, Ill.

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Harlan English, M.D., Chairman, Rural Medical Service, State Medical Society

John W. Neal, Attorney, Chicago, Illinois

V

"The Cancer Problem, What Can Be Done With It"

by

Dr. John Rogers, American Cancer Society, Chicago, Illinois

Dr. Danely Slaughter, University of Illinois College of Medicine, Chicago, Ill.

Dr. Herbert Schmitz, Mercy Hospital, Chicago, Illinois

Dr. Howard Gowen, Department of Health, Springfield, Illinois

VI

"County Health Departments, What They Cost and What They Can Do"

by

Dr. Charles Sutton and Associates, Illinois State Department of Health

THIRTY-FIVE YEARS OF SERVICE

Thirty-five years ago on August 18, 1913, Esther Nelson Fraser started working for the Chicago Medical Society. The offices were located in the old Northwestern University Building at Lake and Dearborn Streets. At that time the officers of the Society were Dr. Charles P. Caldwell, President; Dr. Charles H. Parkes, Secretary; and the Board of Trustees were Drs. Charles P. Caldwell, P. J. H. Farrell, James Clark, E. M. Webster and Charles H. Parkes.

In 1914 the offices were moved to the Marshall Field Annex Building, and later to present quarters at 30 North Michigan Avenue.

Esther Nelson was the only employee, with a part time worker in the office for the Milk Commission. The Society had approximately 2,500 members; the Council consisted of 48 representatives of the branch societies, then numbering 14. Within a few months the Hyde Park-Woodlawn Branch was organized, (now known as the Jackson Park Branch) and the 15 branch units were complete. The Bulletin consisted of four pages of reading material and carried no advertisements, but in 1914 the form was changed and advertising was accepted. For many years the Bulletin appeared only in the winter months.

Today the Chicago Medical Society, with Mrs. Fraser as Assistant Secretary, has 6,230 members; the Council is composed of 85 representatives, and the Bulletin goes out to the membership each week during the year. The office force is made up of capable and very pleasant girls working under her personal supervision and direction. The Bulletin goes over



Mrs. Esther Fraser

her desk each week, and her attendance at the Council and committee meetings is only a part of her diversified duties.

Her work has developed and grown with the progress of the Chicago Medical Society, for many years the largest county society in the United States, and at this time, second only to New York.

As her officers have changed, Mrs. Fraser has adapted her work, her procedure, her routine to coincide with the personalities, the temperaments and the demands of the men under whom she has functioned so efficiently. Time has meant little or nothing to her; she is very apt to be in her office until seven or eight o'clock several nights during a week, if the occasion demands. No one has ever heard her complain about it. She gives unsparingly of her time and her efforts that her work and her office may be as efficient and as effective as possible.

The testimonial dinner to be given in her honor is no more than a gesture of the appreciation the members of the Chicago Medical Society feel for her and for her services. Through the years various factions have come and gone; and through the years Mrs. Fraser has worked with

all groups, impartially and effectively. This in itself is an explicit indication of her tact and intelligence. The tribute paid to Mrs. Fraser by the members of the Chicago Medical Society is sincere and genuine. Her record with the "finest county medical society" is one of service and loyalty, which may well be emulated by the members of the profession associated with her in her Chicago Medical Society office.

MCCULLOCH NEW DIRECTOR OF HEART GROUP

Appointment of Doctor Hugh McCulloch of St. Louis, Missouri, to the dual task of medical director of the Council on Rheumatic Fever of the Chicago Heart Association and medical director of LaRabida Jackson Park Sanitarium was announced recently.

Dr. George K. Fenn, President of the Chicago Heart Association, and Doctor Henry G. Poncher, Chief of Staff at LaRabida joined in a statement that the trustees of both organizations were cooperating in bringing Doctor McCulloch to Chicago as a key figure in a community effort to fight rheumatic fever and promote research to discover its cause.

Doctor McCulloch, regarded as one of the country's outstanding authorities on rheumatic fever, will assume his new duties on January 1st. His post with the Council on Rheumatic Fever is newly created. At LaRabida, he will succeed Doctor Jesse W. Hofer who has resigned to pursue studies as a specialist.

Doctor McCulloch, a graduate of Johns Hopkins Medical School, for several years has been in charge of the Rheumatic Fever Program of the Missouri State Service for Crippled Children. He is a member of the Executive Committee of the American Council on Rheumatic Fever and editor of the medical journal, *Pediatrics*.

12/2/48

ILLINOIS REPRESENTATIVES IN CONGRESS

At this time we are publishing for your information, and for the information of your friends and patients, the names and home addresses of members of the 81st Congress.

Keep your congressman informed of your attitude toward compulsory health insurance, and ask your friends and patients to do likewise.

UNITED STATES SENATORS:

Scott W. Lucas, Dem., Havana. Term expires 1951.
Paul H. Douglas, Dem., 5658 S. Blackstone Ave.,
Chicago. Term expires 1955.

REPRESENTATIVES IN CONGRESS (Term two
years) — (Elected November 2, 1948. Democrats
12; Republicans 14)

District — Name — Politics — and Address

1. William L. Dawson, Dem., 3725 S. Lake Park Ave.,
Chicago
2. Barratt O'Hara, Dem., 7626 S. Saginaw Ave., Chi-
cago
3. Neil J. Linehan, Dem., 8624 S. Bishop Street, Chi-
cago
4. James V. Buckley, Dem., Lansing, Illinois
5. Martin Gorski, Dem., 3143 S. Morgan Street, Chi-
cago
6. Thomas J. O'Brien, Dem., 4858 W. Washington
Blvd., Chicago
7. Adolph J. Sabath, Dem., 113 N. Homan Ave., Chi-
cago
8. Thomas S. Gordon, Dem., 1817 N. Hermitage Ave.,
Chicago
9. Sidney R. Yates, Dem., 3500 Lake Shore Drive,
Chicago
10. Richard W. Hoffman, Rep., Berwyn, Illinois
11. Chester A. Chesney, Dem., 2828 N. Kolmar Avenue,
Chicago
12. Edgar A. Jonas, Rep., 5510 Sheridan Road, Chicago
13. Ralph E. Church, Rep., Evanston, Illinois
14. Chauncey W. Reed, Rep., 241 East Washington
Street, West Chicago
15. Noah M. Mason, Rep., 417 Woodland Ave., Oglesby,
Ill.
16. Leo E. Allen, Rep., 318 Hill Street, Galena, Illinois
17. Leslie C. Arends, Rep., Melvin, Illinois
18. Harold H. Velde, Rep., 700 S. 9th Street, Pekin,
Illinois
19. Robert B. Chipfield, 147 E. Locust Street, Canton,
Illinois
20. Sid Simpson, Rep., Carrollton, Illinois
21. Peter F. Mack, Jr., Dem., 812 East First South St.,
Carlinville, Ill.
22. Rolla C. McMillen, Rep., 465 West Macon Street,
Decatur, Illinois
23. Edward H. Jenison, Rep., 711 Shaw Avenue, Paris,
Illinois

24. Charles W. Vursell, Rep., 207 Ohio Street, Salem,
Illinois
25. Melvin Price, Dem., 426 North 8th St., East St.
Louis, Ill.
26. C. W. Bishop "Runt", Dem., 212 Olive Street,
Carterville, Ill.

**CALL FOR SCIENTIFIC
EXHIBITS FOR 1949**

The Illinois State Medical Society is anxious to present a group of outstanding exhibits during the Annual Meeting in Chicago, May 16, 17, 18, 1949. Sincere effort will be made to make the booths a good background for a good exhibit, attractive and well lighted.

There is a tremendous amount of excellent scientific work done in our state every year, much of which is adaptable to exhibit purposes. In our opinion the Scientific Exhibits are an exceedingly important media of education. It is also worth mentioning that the State Meeting offers an opportunity for an exhibitor to preview his exhibit for the A.M.A. or for Special Society Meetings.

Applications for space in the 1949 Meeting are now being received. If you are interested in presenting an exhibit, please complete the form below and mail to the Director of Exhibits: Coye C. Mason, M.D., 551 Grant Place, Chicago 14, Illinois.

Hugh A. Flack, M.D.
6 North Michigan Avenue

Lawrence A. Peterson, M.D.
55 E. Washington Street

Hilger P. Jenkins, M.D.
826 East 61 Street

Arnell Vaughan, M.D.
30 North Michigan Avenue

Coye C. Mason, Chairman and Director

Title
(State exact title of exhibit suitable for the program and The Journal announcements.)
Name of Exhibitor (s)
.....
Institution (s)
.....
City State

MEDICAL ECONOMICS

The Medical Economics Committee. Chauncey C. Maher, Chmn., Hubert L. Allen, Emmet B. Bay, Edwin F. Baker, Carroll Birch, Thomas C. Browning, Roland R. Cross, James Graham, George Halperin, Edwin S. Hamilton, Ford K. Hick, Edwin F. Hirsch, May McDonald Milligan, Marie Wessels, Walter M. Whitaker, Holland Williamson.



A CONFLICT IN ANAESTHESIOLOGY

The present temporary quickening in the developmental process of anaesthesia as a specialty has produced some misunderstanding and occasionally heated ill feeling among physician anaesthesiologists and nurse anaesthetists. Fuel has been added to the flame by friends of the two principals who feel impelled to defend a stand taken by one or the other of these more intimately involved groups.

The basis of this conflict appears as a wish to hasten an evolutionary process that is already developing at a faster pace than can be met. There are some who desire to effect today, by force if necessary, some of the end results that careful analysis demonstrates cannot come about for several decades. For example: as the specialty evolves we would expect, as one of the results, a well trained physician anaesthetist heading every department of anaesthesia, with as many physician associates as the needs of an institution require. There are some anaesthesiologists who would completely eliminate the nurse anaesthetist as of today in an attempt to arrive at this end result immediately. They have even fostered legislation that would make it illegal for a surgeon to engage the services of a nurse

anaesthetist. The Board of Directors of the American Society of Anaesthesiologists, Inc. passed a resolution on June 11, 1947 disapproving the training of persons, other than doctors of medicine, in the science and art of anaesthesia. It is obviously the contention of these extremists that today anaesthesia should be administered only by physicians.

Certain scare articles that have appeared in lay magazines follow a theme that is suggestive of an origin within the profession. "Will You Live Through Your Operation?" appeared in *Readers Scope* in February 1947. "When They Put You Out" came out in the August 1947 *Cosmopolitan*; "Unknown Men in White" in the November 1947 *This Week*. The following partial extract is illustrative: "Suppose you're on the way to the operating room. Within a few minutes your life will be in the hands of two people. Unluckily for you, most anaesthetists are not qualified for the job — Think of this when the warm mask goes over your face." The ideas behind these articles are not imputed to the profession, and yet the attitude of many anaesthesiologists toward nurse anaesthetists engenders the conception that the nurse anaes-

thetist is an incompetent member of the surgical team.

Any immediate radical change is a numerical impossibility because anaesthetists both physician and nurse are a scarcity today.

Anaesthesiology, as a nursing specialty, was founded by Alice Magaw at the Mayo Clinic in 1899 and in 1914 the first regular school for nurse anaesthetists was opened at the old Lakeside Hospital in Cleveland by Agatha Hodgkins. Today, there are more than 50 schools recognized by the American Association of Nurse Anaesthetists turning out 300 to 400 graduates per year. There are in the United States over 4,000 practicing, trained nurse anaesthetists. Anaesthesiology, as a medical specialty, is very young. The Specialty Board was formed in 1938 and the members of the board number about 400. There are about 1,000 physician anaesthetists not recognized by the board. Thus a total of about 5,500 individuals trained in anaesthesiology service the 6,280 registered hospitals in the United States. The elimination of 4,000 nurses from this picture would disrupt our entire hospital set-up.

An attitude that the nurse should be eliminated entirely from anaesthesia is premature and unsound scientifically because the scope of the field has not unfolded to a point that allows one to form a complete opinion on which phases are purely automatic, technical and safe under supervision as contrasted with those that require judgments, sometimes rapid, based on the broad background of present day formal medical schooling. Physician anaesthetists as a coherent branch of the profession have not yet sighted their aims well above the execution of technical skills. The University status of the science as a scholarly and investigating branch of medicine is not yet clearly defined throughout the United States. Adventures into the development of the multiple functions of the anaesthesia specialty noted elsewhere have been confined to relatively few. In a more fully developed anaesthesia field the completely trained and experienced expert will need assistance in the execution of routine technical skills from persons other than physician anaesthetists.

The extreme position toward eliminating nurses leaves no room for a nurse anaesthetist as a technician or an anaesthesia technician, such as

the surgeon's operating nurse, the pathologist's laboratory technician and the roentgenologist's x-ray technician. Some of the misunderstanding by nurse anaesthetists derives from the feeling that physician anaesthetists regard nurses as incompetent to administer anaesthesia and as capable only of menial chores. This attitude fosters eradication of a minor profession that today has standing and economic stability; a minor profession that has grown up with surgery. An anaesthesia technician or nurse anaesthetist in the future, under a physician anaesthetist of greater stature in a more fully developed specialty, could have social and intellectual standing and economic stability equal to those of today. Can there not be in a relative sense, major and minor practitioners of a profession? Most branches of medicine using technicians practically use this sub-division of work.

Harvard University's Professor of Anaesthesiology, Henry K. Beecher, has made an admirable attempt to envision anaesthesia in its maturity and has sub-divided it into its teaching, investigative, clinical and purely technical phases. In relation to the problem under discussion, it is his opinion today that nurses should be limited to the administration of ether and nitrous oxide-oxygen. Some feel that if the nurse is able to use ether, she should be able to use pentothal, cyclopropane and spinal. Beecher counters this with the thought that the safety factor is much greater with ether. When respiration stops from ether over-dosage, the intake stops spontaneously before circulatory damage has occurred.

Many excellent surgeons of professorial status disagree with this limitation placed on the nurse. Many physician anaesthetists disagree with members of the specialty in their tendency to underrate the ability and worth of well-trained nurse anaesthetists. Alfred Blalock, discussing the subject before the American Surgical Association in March of 1947, stated that his nurse had anaesthetized the last 225 patients upon whom he operated for congenital heart disease and that he and his associates naturally had the highest regard for her ability.

Great advances have been made by the leaders in anaesthesia during the past 25 years and extremely potent and rapidly acting drugs have been introduced. The surgeon in his responsibility to the patient must keep abreast of the

pharmacological and physiological actions of these drugs, but he does not and cannot supervise their administration as he might have done in former days, when he told the family physician or the untrained nurse to pour on more or less ether, to hold up the jaw, to slip in an airway or to pull out the tongue. Nurse anaesthetists recognized by the American Association of Nurse Anaesthetists have had considerable didactic and practical training in the use of these potent agents. Perhaps the didactic training is too much for their backgrounds but practical training is usually extensive. Improvement in the anaesthesia departments of most hospitals during the past ten years has been at a rate that compares favorably with the improvement in the surgical departments. The nurse anaesthetist has grown with American surgery and anaesthesia and has shared in the improvement. She has proved herself, in most instances, a competent team mate.

At the present stage in the development of anaesthesiology, it is only fitting that a fully developed anaesthesia department should supply consultation and help that is to be found only in the physician anaesthetist. The department should be able to grade an operative risk and should be able to advise the surgeon as to the most desirable type of anaesthetic. It should take complete charge of the patient's care on the operating table. In the past, this has been the responsibility of the operating surgeon and constitutes a division of thought and concentration that is neither completely safe for the patient nor comforting to the surgeon. Such supervision includes the use of parenteral drugs and fluids. This presumes a responsibility for the detection of and the treatment of shock. The earliest symptoms of blood transfusion reaction must be detected and combated. How comforting it is, after an extensive surgical procedure, to see the patient leave the operating room warm, pink and dry, rather than cold, blue and moist. Cardiac arrest is first detected by the anaesthetist. It is his duty to discover it and restoration is in his hands. Carotid sinus reflexes fall within this same category. Anaesthesia cannot be divorced from surgery, as an automatic and only coincidental procedure. It has been said that surgery is tied as closely to anaesthesia as it is to hemostasis.

An anaesthesia department should provide caudal and spinal anaesthesia in fixed or continuous form. It should provide diagnostic and therapeutic nerve blocks. Aspiration bronchoscopy in the post-operative period should be a function of the anaesthesia department. Resuscitation and shock; gas therapy of various kinds; sedation in general and the problems of aviation medicine, as related to gases and gas pressures fall within the clinical, technical and investigating realm of anaesthesia.

Anaesthesiology is developing because more physicians of high class intellectual competence and investigative spirit are entering the field. This produces a strong, natural and positive growth. The desire to hasten an already rapidly developing process by declaring minor practitioners of anaesthesia or nurse anaesthetists incompetent and eliminating them in one stroke is a weak and negative approach. We must continue with the nurse anaesthetist while the medical specialty of anaesthesiology enlarges and matures. The nurse cannot be eliminated. Likewise, because maturity is a matter of 15 to 20 years, the training of nurse anaesthetists must continue. The attitude expressed as "We'll use them but we won't train them" does not help. The required number of nurse anaesthetists cannot be trained in University centers where greater teaching facilities are available and for this reason training must continue in the nurse anaesthetist schools. The way should be paved for closer understanding and cooperation between physician and nurse anaesthetist societies so that nurse anaesthetist schools can seek and obtain help from physician directors.

The great limiting factor is the shortage of trained physician anaesthetists. Many men, discharged from service, were eager for training. However, men released from ASTP and V-12 programs will not be available much longer. The expansion of present hospital facilities, particularly those connected with government work, increases the demand for trained anaesthesiologists. The shortage of good men will be acute for many years. The attraction of men into anaesthesia will be slow but it will accelerate as the leaders in the field develop it and bring it to bloom. They will enlarge the purpose and function of the field and enrich its techniques.

Anaesthesia departments will assume full stature in the Universities as they cooperate with the departments of physiology and pharmacology and as they take over the pertinent basic science instruction in these fields. Certainly, it is not purely visionary that an anaesthesiologist should give the basic science courses in relation to the drugs and agents used in anaesthesia. The field must enlarge along intellectual and scholarly lines devoting as much time and attention in these directions as it does to small differences in minute clinical technics.

Anaesthesiological societies must frown on quibbling over nurse anaesthetist. Once the physician anaesthetist reaches his full standing and anaesthesia attracts its proportionate share of good men from intern and graduating classes, the nurse anaesthetist, naturally and gradually, assumes her proper position in the relative scale in the field. She has a standing and a position of which she may be proud and the limitations

of her work are those defined by her individual physician anaesthetist. Certainly, any law that would regulate the kinds of technics the nurse anaesthetist may employ is wrong. Resort to public discredit and to law to control practices within the profession is bad policy. The use of certifying boards in coercive fashion is equally bad for such regimentation is easily transcribed into law. Anaesthesiological societies should do all in their power to prevent discredit to the nurse anaesthetist in the press.

The majority of physician anaesthetist recognize this inevitable flowering of their specialty and they take the realistic attitude that the nurse anaesthetist must continue to function but as time passes to function more and more closely under the guidance of physician anaesthetist. This process takes place inevitably as the stature of the anaesthesiological profession rises above that of the nurse anaesthetist profession.—J. G.

WANTED: UNKNOWN DIABETICS

Physicians will be interested in a national broadcast entitled "Wanted: Unknown Diabetic" which will be one of the 1949 winter series of AMA-NBC broadcasts, sponsored by the AMA, entitled "Your Health Today."

It is estimated that there are about 2,400,000 unknown diabetics in the country today and the broadcast is part of a program of publicity planned for National Diabetes Week which will endeavor to call attention to premonitory warnings and early signs of diabetes.

Featured speakers on the AMA program will be Dr. Elliott P. Joslin and Dr. Howard F. Root

of Boston; Dr. Charles H. Best of Toronto; Dr. Lester J. Palmer of Seattle, western vice president of The American Diabetes Association. A patient who has successfully coped with diabetes for more than twenty-five years and remains in excellent health will also take part in the program.

Included in the program will be a memorial tribute to Sir Frederick Banting who, with Dr. Best, discovered insulin and made the control of diabetes possible.

The broadcast will be supervised by Dr. W. W. Bauer of the AMA Bureau of Health Education, and Miss Judith C. Waller of NBC.

Minnesota Med. 11-48

CORRESPONDENCE



FEBRUARY CLINICS FOR CRIPPLED CHILDREN

The University of Illinois Division of Services for Crippled Children will conduct 18 clinics in Illinois cities and towns during the month of February, Dr. Herbert R. Kobes, director, announced.

The clinic schedule for 1949 calls for 160 general clinics at which diagnostic orthopedic, pediatric, speech and hearing examinations will be made. Special clinics will include 36 for rheumatic fever patients and 16 for cerebral palsied children. Arrangements are also made for examinations at epileptic clinics.

Medical examinations at these clinics are made by private physicians who are certified Board members. Upon their recommendations for treatment and care the Division carries on much of its program to aid the State's many thousands of physically handicapped children.

Eligibility for assistance by the Division is governed by the following conditions:

1. A child must be less than 21 years of age.
2. Parents or guardians must be living in Illinois and economically eligible for assistance. (This means they need financial help even though they may not be indigent.)
3. The child must be mentally educable.
4. The child's condition must be such that it promises to respond favorable to medical and allied types of treatment.

Children accepted for care are those with:

1. Orthopedic conditions including acute poliomyelitis.
2. Rheumatic fever and heart disease.
3. Conditions of the nervous system.
4. Cerebral palsy
5. Congenital and acquired defects which respond to plastic surgery
6. Speech defects associated with organic conditions
7. Hearing loss and deafness
8. Epilepsy

The objective of the Division's program is to make available all services and resources which will allow, within reasonable limits, all physically handicapped children to reach adult life as happy, well-adjusted, and self-sustaining citizens.

The February clinic schedule is as follows:

- | | |
|----------|--|
| February | 1—E. St. Louis, Christian Welfare |
| February | 2—Chicago Heights, St. James Hospital |
| February | 3—Hinsdale, Hinsdale Sanitarium |
| February | 3—Mt. Vernon, American Legion Home |
| February | 8—Peoria, St. Francis Hospital |
| February | 8—Carrollton, Grade School |
| February | 9—Glenview, Village Hall |
| February | 11—Chicago Heights (Rheumatic Fever), St. James Hospital |

February 15—Vandalia, American Legion Home
 February 15—Watseka, County Court House
 February 16—Elgin, Sherman Hospital
 February 17—Rockford, St. Anthony's Hospital
 February 18—Litchfield, St. Francis Hospital
 February 22—Peoria, St. Francis Hospital
 February 22—Effingham (Rheumatic Fever), St. Anthony's Hospital
 February 23—Springfield (Cerebral Palsy), St. John's Hospital
 February 24—Normal, Brokaw Hospital
 February 25—Chicago Heights (Rheumatic Fever), St. James Hospital

RESEARCH FELLOWSHIPS AVAILABLE

To The Editor:—

Announcement of the availability of 10 research fellowships to be awarded for one year in the fields of medicine, dentistry, and pharmacy has been announced by the University of Illinois Graduate College in Chicago.

The fellowships carry stipends of \$1,800 per year for medical and dental graduates and \$1,200 for pharmacy graduates, with exemption from tuition fees for all appointees. Registration in the Graduate College for credit toward M.S. or Ph.D. degrees is required.

Appointments cover a calendar year with a one month vacation. Fellows are eligible for re-appointment in competition with the new applicants.

Candidates for fellowships must have completed a minimum training acquired in any one of the following ways, or the equivalent thereof:

1. Work leading to the B.S. or B.A. and M.D. degrees.
2. Work leading to the B.S., M.S. and D.D.S. degrees.
3. Work leading to the B.S. or B.A. degree in a four-year collegiate course and to the D.D.S. degree.
4. Work leading to the B.S., D.D.S., or M.D. degrees.
5. Work leading to the B.S. or B.A. degree followed by a degree in pharmacy (4 year course).
6. Three years of collegiate work followed by

a degree in pharmacy (4 year course) and M.S. degree in pharmacy.

Candidates should indicate the field of research in which they are interested and submit transcript of their scholastic credits, together with the names of three former science teachers as references. Appointments will be announced March 1, 1949, or shortly thereafter. The fellowship year begins on July 1, 1949, or September 1, 1949.

Formal application blanks may be secured from the Secretary of the Graduate Committee, 1853 W. Polk Street, Chicago 12, Illinois.

"YOUR MENTAL HOSPITALS" OUT-PATIENT CLINICS

In previous articles on the Illinois Department of Public Welfare, in-patient facilities for mental patients were discussed to acquaint physicians with mental hospitals at their disposal. In keeping with the modern trends in psychiatry, the Department operates 48 clinics to treat patients on an out-patient basis.

Clinics were originally established in 1915 to provide follow-up care and treatment to patients conditionally discharged from state hospitals. Later, cases were referred from physicians, recognized social agencies and county courts, for pre-commitment interviews and therapy. It was found that many of these patients were benefited by treatment, and admission to a mental hospital was not necessary.

The Department can only care for the psychiatrically indigent. The cases are referred by the courts, recognized Social Agencies and physicians. The patient must bring a note, signed by the physician, stating that the individual being referred to the clinic is financially unable to pay for psychiatric care.

During the past fiscal year, approximately twenty thousand patients attended these clinics. The larger facilities, namely, the Institute of Juvenile Research, Chicago Community Clinic and the Veterans Rehabilitation Center in Chicago, function on a full-time basis. The others, due to shortage of available personnel, function on a part-time basis.

The attached tabulation contains the locations and types of clinics. For further information, the hospital supervising the respective clinic should be consulted.

PSYCHIATRIC CLINICS
ILLINOIS DEPARTMENT OF PUBLIC WELFARE

City	Clinic	Adults Under Supervision	Children Under Clinic Supv.	Veterans Under Clinic Supv.
Alton	1	Alton State Hospital		
Anna	1	Anna State Hospital		
Aurora				1 VRC†
Bloomington			1 IJR*	
Carbondale			1 IJR*	
Carlinville	1	Alton State Hospital		
Carmi	1	Anna State Hospital		
Chicago	1	Chicago State Hospital		
	1	Chicago Community Clinic		
	1	Ill. Neuropsychiatric Inst.	1 IJR*	1 VRC†
Danville	1	Kankakee State Hospital		
Decatur	1	Jacksonville State Hospital		
Dixon	1	Dixon State Hospital		
East Moline	1	East Moline State Hospital		
East St. Louis	1	Alton State Hospital	1 IJR*	
Effingham	1	Alton State Hospital		
Elgin	1	Elgin State Hospital		
Freeport	1	East Moline State Hospital		
Galesburg	1	East Moline State Hospital		
Geneva			1 IJR*	
Harrisburg	1	Anna State Hospital		
Jacksonville	1	Jacksonville State Hospital	1 IJR*	
Joliet	1	Kankakee State Hospital		
Kankakee	1	Kankakee State Hospital		
Kewanee	1	East Moline State Hospital		
LaSalle	1	Manteno State Hospital	1 IJR*	
Litchfield	1	Alton State Hospital		
Mount Vernon	1	Anna State Hospital		
Normal			1 IJR*	
Olney	1	Anna State Hospital		
Peoria	1	Peoria State Hospital	1 IJR*	
Quincy	1	Jacksonville State Hospital	1 IJR*	
Rockford			1 IJR*	
Savanna	1	East Moline State Hospital		
Springfield	1	Jacksonville State Hospital	1 IJR*	
Sterling	1	East Moline State Hospital		
Urbana-Champaign	1	Kankakee State Hospital	1 IJR*	1 VRC†
Vandalia	1	Alton State Hospital		
West Frankfort	1	Anna State Hospital		
Total	33		12	3

* IJR Institute for Juvenile Research, Chicago

† VRC Veterans Rehabilitation Center, Chicago

SUPPLIES FOR CANCER PATIENTS OFFERED

To The Editor:—

The cancer patient who needs large quantities of dressings presents a real problem to indigent and middle-income families.

On the request of the physician, the Illinois Division, American Cancer Society, will supply to cancer patients being cared for in their homes the following:

1. Cancer dressings (clean but unsterile) made of cellu-cotton covered with white salvage material in sizes 5" x 15", 4" x 4", and 9½" by 12".
2. 4" x 4" gauze covered pads (sterile) limited to use by patients with cancer of the head and neck.

Requests may be directed to: American Cancer Society, Illinois Division, 139 N. Clark Street, Chicago 2, Illinois. Phone — Franklin 2 — 0472

TRAINING COURSES AVAILABLE TO MEDICAL OFFICERS

Training courses ranging in length from 5 months to a year and given in specified civilian institutions during the fiscal year 1950 are now being offered to qualified Regular Army personnel, Major General Raymond W. Bliss, the Army Surgeon General announced today. A development of the Medical Department's Career Guidance Plan, evolved some two years ago, this new program provides courses for officers of the Medical Corps, the Dental Corps, the Veterinary Corps, the Nurse Corps, the Medical Service Corps, and all three sections of the Women's Medical Specialist Corps.

The subjects include most of the medical and allied science fields at leading universities, colleges, hospitals and foundations. It is the stated intention of the Surgeon General's Office to train personnel whose records and aptitudes show them best qualified to draw the maximum benefits from advanced study. Applications for training are to be forwarded to the Surgeon General's Office, prior to February 1, 1949.

The program, tentatively established in twenty-five civilian institutions, has a twofold aim: to insure advancement in their respective specialties to each of the officers selected, and to integrate the best of civilian medicine with military medicine. Detailed information and instructions for applicants are set forth in SGO circular 134, dated November 16, 1948.

CHANGE CANCER CLINIC SCHEDULE

To The Editor:—

For several months the Cancer Diagnostic Clinic instituted at the Passavant Memorial Hospital in Jacksonville, has held its meetings on Monday.

We would appreciate your giving publicity in the Illinois State Medical Journal to the fact that our meeting day has been changed to Thursday A.M. at 8:30. This change was made in order to accommodate physicians of the surrounding community who felt that the accumulated work at the end of a week end prevented their attending.

Yours very truly,
Robert R. Hartman, M.D.
Director
Tumor Diagnostic Clinic

ORIGINAL ARTICLES



Vaginal Hysterectomy

Ralph A. Reis, M.D. and Edwin J. DeCosta, M.D.
Chicago

A complete understanding of the problems encountered in the performance of a vaginal hysterectomy requires thorough knowledge of the problems encountered in all types of vaginal surgery. Technical competence cannot be acquired from texts. Mastery comes only with experience, and with the development of skill in the execution of well organized concepts.

The history of vaginal hysterectomy like the history of most of the accomplishments of the human race, covers an unbelievably long period of time — actually it covers the past 2000 years. With the advent of aseptic surgery in the last century (1867) the interest in and popularity of vaginal surgery steadily increased. However, even at the present writing, there are those who regard vaginal hysterectomy as a formidable procedure. This resistance arises from the belief that operative competence and skill in vaginal

surgery cannot be attained as readily as in abdominal surgery. This is a strange point of view for the very origin of this operation was dependent upon its practicability under the most unsuitable conditions, in unfavorable surroundings and at a time when other procedures were of no avail.

This does not mean that every hysterectomy should be carried out by the vaginal route. Furthermore it should not be attempted until the operator has acquired a thorough knowledge of the anatomic relations of the uterus, the adnexae, bladder, ureters and bowel. This must also include accurate knowledge of the pelvic blood supply and pelvic supporting structures. Where such knowledge is combined with operative skill and experience, vaginal hysterectomy is a simple and relatively safe operation.

Vaginal hysterectomy has many advantages over abdominal hysterectomy. The avoidance of an abdominal incision eliminates incisional pain and precludes the danger of evisceration and/or incisional hernia. Since the nearly universal

From the Departments of Gynecology and Obstetrics of the Michael Reese Hospital and Northwestern University Medical School, Chicago, Illinois.

Read before General Assembly, Illinois State Medical Society, Chicago, May 10, 1948.

adoption of early ambulation this is decidedly advantageous. The avoidance of bowel manipulation helps to keep the incidence of postoperative distention, ileus and shock at a minimum. This adds greatly to both the safety and comfort of the patient.

Urethrocele, cystocele, impairment, rectocele, enterocele, lacerated perineum and varying degrees of genital prolapse are frequent accompaniments of uterine conditions which require hysterectomy. The operative technic for vaginal hysterectomy can be carried out in such a way as to include the correction of any or all of these conditions. Thus the patient is spared the dangers which are inherent in either prolonged or double operations. Lastly vaginal hysterectomy is particularly valuable for the obese patient. Here the ease of approach is added to the advantages previously mentioned.

The attempt is repeatedly made in the current literature to show that the morbidity and mortality resulting from vaginal hysterectomy is distinctly lower than that following subtotal or total abdominal hysterectomy. This is an unwarranted assumption on the part of those who are over enthusiastic. A careful study of present day reports will show practically the same mortality for both vaginal and abdominal hysterectomy.

TOTAL HYSTERECTOMIES SINCE 1945

Author	Operations	Mortality	Percent
Tyrone	478	1	0.21
Feeney	388	1	0.25
Siddall	150	1	0.76
Danforth	500	2	0.4
	1514	5	0.32

VAGINAL HYSTERECTOMIES

Averett	2427	6	0.24
Campbell	2798	9	0.32
Falk	500	1	0.2
Allen	640	1	0.16

In spite of the many advantages of vaginal hysterectomy there are some definite disadvantages. These include the inability to carry out abdominal exploration, and the inaccessibility of the appendix should its removal be indicated. Adnexal surgery can be an accompaniment of vaginal hysterectomy. However, this is frequently difficult and occasionally impossible.

Specific indications for vaginal hysterectomy include all benign uterine conditions for which hysterectomy is the proper method of treatment.

This will include uterine fibroids, adenomyosis, polypoid uterine tumors, intractable functional bleeding, uterine prolapse and stricture of the cervix which does not respond to suitable therapy. These indications are, however, tempered by the following contra-indications: marked uterine fixation, pelvic inflammatory disease, adnexal tumors, previous abdominal pelvic surgery, a narrow or stenotic vagina, the need for abdominal exploration, large intra-ligamentous tumors and finally large uterine tumors. It is difficult to define specifically the size of tumors that should be removed vaginally since much depends upon the experience and skill of the operator. Enormous fibroids have been successfully extirpated by morcellation, but the increased operating time, blood loss and physical strain on the operator are not compensated for by any advantages to the patient. Lastly vaginal hysterectomy is never indicated in uterine malignancy.

The gynecologist must consider carefully whether the abdominal or vaginal approach is to be selected. To reach this decision he must have ample experience and skill in both methods. The patient undergoing hysterectomy will then have the best chance for restoration of health. It must be emphasized that hysterectomy, whether vaginal or abdominal, for a small and freely movable uterus should be a simple operation. Hysterectomy for a relatively large uterus and/or in the presence of complicating pathology may be technically difficult by either method. It is in these latter cases that experience, skill and judgment play so important a role.

There are many methods for performing vaginal hysterectomy. Modifications are essential to meet varying problems. Basically, however, the following principles obtain under all conditions.

- (1) Adequate exposure.
- (2) Circumcision of the cervix to separate the vagina from the cervix.
- (3) Dissection of the bladder from the uterus.
- (4) Division of the supporting structures.
- (5) Hemostasis.
- (6) Reestablishment of suitable support for vagina, bladder and rectum.

In general vaginal hysterectomy falls into five categories:

- (1) Simple vaginal hysterectomy.
- (2) Vaginal hysterectomy in which reduction of the uterine mass is necessary or desirable.
- (3) Vaginal hysterectomy associated with repair of cystocele, urethrocele and/or impairment.
- (4) Vaginal hysterectomy associated with prolapse.
- (5) Vaginal hysterectomy associated with repair of rectocele and/or lacerated perineum and obliteration of enterocele.

Simple Vaginal Hysterectomy. — After anesthesia the patient is placed in lithotomy position, the bladder is catheterized and the vagina iodinated. The cervix is exposed by posterior and lateral retraction, grasped with a double vulsellum forceps and pulled toward the introitus and upward toward the symphysis thus exposing the posterior vaginal fornix. A transverse elliptical incision is made at the level where the smooth mucosa of the cervix meets the corrugated mucosa of the vagina. Downward traction of the corrugated margin and continuing upward traction of the cervix exposes the underlying areolar tissue which is readily divided. The peritoneum is then opened at the most dependent portion of the cul-de-sac.

The cervix is now pulled downward and a corresponding elliptical incision is made at the lowest level at which the vaginal mucosa is movable on the cervix. The incision is carried thru the underlying fascia to the anterior surface of the cervix. It is extended thru mucosa only, laterally, on either side to join the posterior incision. The anterior vaginal wall and bladder are now separated from the anterior uterine surface and pushed upward by the gauze covered finger until the vesico-uterine reflection of the peritoneum is exposed.

The complete mobility of the bladder thus achieved carries the ureters away from the operative field. Maintenance of the dislodged bladder behind the symphysis by retraction will minimize the risk of bladder and ureteral injury. The exposed anterior reflection of the peritoneum is now incised. When the peritoneal reflection is not readily reached one may proceed without opening the vesico-uterine pouch since this is not essential provided that the posterior pouch has been previously opened. The latter permits

easy access to the uterosacral ligaments, division of which will increase uterine mobility.

The cervix is again carried forward and the left index finger is inserted into the cul-de-sac. A curved 7 inch clamp (Heaney) is introduced along side the finger and the uterosacral ligament grasped in its entirety and cut close to its cervical attachment. The clamp is replaced by a mattress suture (chromicized catgut No. 0 or No. 1 are used throughout). The same procedure is carried out on the opposite uterosacral ligament. This mobilizes the uterus and allows it to descend to a lower level. Ligatures on the uterosacral ligaments are left long and marked to simplify subsequent identification. The cervix is pulled downward and outward, the bladder and anterior vaginal wall are retracted away from the anterior surface of the uterus, and the base of the broad ligament (cardinal) on either side is clamped, cut and ligated using mattress sutures. If the uterus is small this suture usually includes the uterine artery. If not, an additional clamp is used on the uterine artery which is then cut and ligated in a similar manner.

At this point the cervix is amputated at about the level of the internal os. This should precede any attempt to bring the fundus into the vagina. Removal of the cervix shortens one arm of the lever thus facilitating subsequent rotation of the corpus uteri. Furthermore removal of the cervix eliminates what is frequently infected tissue, thus preventing contamination of the peritoneum.

The anterior surface of the corpus is exposed by retraction and brought down and into the anterior peritoneal opening by a succession of single vulsella bites. When the fundus has been reached it is drawn to the vulva. If at this time, or at any other time after the peritoneal cavity has been entered, bowel or omentum appear in the operative field, lowering the head of the table will cause these structures to fall away. It is rarely necessary to introduce a narrow gauze pack to keep the abdominal contents out of the operative field.

In those instances in which the anterior peritoneum has not been incised or when the uterus is in complete retrodisplacement the fundus should be brought out in a similar manner thru the posterior peritoneal opening.

The cornual attachments of round ligament, tube and utero-ovarian ligament are now clamped

with a curved 7 inch forceps and cut. The remaining bridge of the broad ligament below the cornu is clamped and cut thereby freeing one side of the uterus. The same procedure is carried out on the opposite side thus completing the hysterectomy. The clamps are replaced by mattress sutures, those on cornual structures being left long for future identification and traction. At this time inspection and palpation of both tubes and ovaries should be carried out. The adnexae may be removed if unexpected pathology is encountered by clamping and cutting the infundibulo-pelvic ligaments and the broad ligament just below the mesovarium. The ovary can be removed by clamping and cutting the mesovarium. The clamp is replaced by a mattress suture.

Traction on the round ligament sutures brings these structures out of the peritoneal cavity. The anterior and posterior peritoneum are now sutured together transversely. Laterally, the peritoneum is attached as high as possible to the round ligaments. If the cul-de-sac is deep and/or an enterocele is present the technic for peritoneal closure is varied in order to obliterate the posterior peritoneal sac. This is accomplished either by removal of the sac by dissection or by suturing the anterior peritoneal margin to the posterior peritoneum above the pouch of Douglas rather than at the line of original incision.

Once the peritoneal cavity is closed the round ligament stumps are approximated in the midline by several interrupted sutures. The first of these sutures is placed at the lower free ends of the round ligaments. Successive sutures unite the round ligaments above this level until all the slack is taken up. Tension on the round ligaments is to be avoided because it results in postoperative pain and it may tear the suture line.

The free united ends of the round ligaments are now sutured to both uterosacral ligaments by one encircling suture. This creates a complete musculo-fascial plane across the vaginal vault and prevents postoperative vaginal hernia and prolapse of the vagina.

The lateral angles of the vaginal incision are approximated by double sutures which serve both for hemostasis and traction. The anterior and posterior vaginal mucosal margins are next approximated by interrupted sutures. Such trans-

verse closure of the vaginal mucosa is desirable because it provides a wider vaginal vault.

Long experience with complete closure of the vaginal incision has shown that vault drainage not only has no advantages but has distinct disadvantages. Ordinarily there is no gross accumulation of serum or blood which requires drainage; the drain acts as a wick which favors the introduction of contaminating organisms; and finally the drain prevents the accurate approximation of tissue. The use of the vaginal pack likewise serves no purpose. It prevents free drainage, and interferes with spontaneous urination. It can not aid in hemostasis since constant pressure can not be maintained against the vaginal vault.

Vaginal Hysterectomy In Which Reduction Of The Uterine Mass Is Necessary Or Desirable. — On occasion the uterus turns out to be larger than has been estimated preoperatively. If it can not be brought into the vagina readily or if the uterine bulk will block the entire vagina, bisection of the uterus is indicated. At this stage the cervix has been amputated. Since both uterine arteries have been ligated bisection in the midline should result in little bleeding. If it has been impossible to ligate the uterine arteries some bleeding will ensue but usually this is negligible provided that the incision is made in the midline. To accomplish simple bisection single vulsella are placed at the lateral margins of the lower pole of the uterus. Downward and outward traction is maintained as the uterus is split by scissors. One blade of the scissors should be in the uterine cavity during the division of both anterior and posterior walls. Both anterior and posterior wall incisions are carried into and thru the fundus. One half of the uterus is now pushed up into the pelvic cavity while the other half is clamped, cut and ligated in the usual manner. The second half is then brought down into the vagina and removed. If one or more fibroids of appreciable size present themselves during bisection, their enucleation will make bisection easier.

Occasionally a lowlying subserous or intramural fibroid interferes with the usual technic. When such fibroids are assessible it is advisable to remove them by enucleation before proceeding. The fibroid is exposed by an incision of the overlying myometrium or capsule, grasped with a

vulsellum and shelled out by blunt dissection or split and removed piecemeal.

Vaginal Hysterectomy Associated With Repair of Cystocele

The presence of a cystocele requires a specific treatment of the anterior vaginal wall. These necessary dissections can be done more accurately and more easily before the uterus has been removed. This more than compensates for the slight additional blood loss which is incurred when the dissection is performed before hysterectomy.

The mucosa above the transverse anterior cervical incision is picked up with tissue forceps. Curved blunt scissors are inserted closed in the midline with the tip directed against the mucosa for a distance of 2 cm. By forcibly opening the scissors the mucosa is separated from the underlying fascia and bladder. This maneuver is repeated until the dissection has been carried upward to a point just below the (external) urinary meatus. When the vaginal mucosa has been completely separated it is split in the midline. In a large cystocele it is often advantageous to cut the vaginal mucosa as the blunt dissection proceeds.

The free edges of the vaginal mucosa are picked up with forceps and the bladder fascia is separated laterally from the mucosa by scalpel dissection. Lateral traction on these mucosal flaps helps to identify the plane of cleavage. Once this plane is reached the gauze finger continues the separation by blunt dissection. This must be carried far enough laterally to mobilize the bladder completely for future repair. The low lying bladder must be carefully freed from the uterus. Therefore the lateral bands of pubocervical fascia must be cut at their cervical insertions. On occasion small surface vessels require ligation. Once the bladder is completely mobilized the hysterectomy proceeds as previously outlined.

Following peritoneal closure and suture of the round ligament stumps in the midline, the defect in the bladder fascia is repaired by uniting the fascial margins in the midline with interrupted sutures. The lower margin of the re-united bladder fascia is then sutured to the round ligament stumps. This effectively repairs the anterior fascial plane. Now the uterosacral stumps are united to the round ligaments thus closing off the posterior area and thereby produc-

ing a solid fascial plane from urethra and pubis anteriorly to the rectum posteriorly. Excess mucosa of the anterior flaps is removed and the free margins are joined below the newly created fascial plane.

Vaginal Hysterectomy Associated With Prolapse. — One of the many advantages of the technic described for both simple vaginal hysterectomy and vaginal hysterectomy with cystocele repair is the careful construction of the vaginal supports. The incidence of postoperative vaginal hernia or inversion is practically nil. This same technic will cure any degree of prolapse present at the time of operation. Meticulous care should be used to insure good approximation of the united round ligaments to the pubovesicocervical fascia anteriorly, and the uterosacral ligaments posteriorly. With marked prolapse or procidentia the excess slack of the supporting structures should be taken up. However, these tissues must be united without tension because the usual retraction that accompanies healing results in ligament shortening. If these tissues are placed under undue tension post operative retraction will lead either to failure of the suture line with resulting lack of support or to continuous pain and discomfort.

The statement is frequently made that vaginal hysterectomy for prolapse is technically more complicated and difficult than simple vaginal hysterectomy. The technic herein described is practically the same for both operations. The adoption of this technic obviates the necessity for multiple procedures.

Vaginal Hysterectomy Associated With Repair of Rectocele and/or Lacerated Perineum

The final step in vaginal hysterectomy is the correction of rectocele and perineal relaxation whenever present. While these procedures do not aid in the correction of prolapse they do aid in the restoration of the pelvic floor.

Post-Operative Care. — Vaginal hysterectomy causes little pain except when there is associated repair of cystocele or rectocele. Much of this pain can be eliminated by the avoidance of undue tension since pain is the direct proportion to the tension produced in the supporting structures.

Patients who have undergone vaginal hysterectomy are urged to get out of bed during the second twenty-four hours and to walk during the third twenty-four hours. Such early ambu-

lation reduces catheterization following simple hysterectomy to a minimum. When there has been a cystocele repair the routine use of an indwelling catheter for 96 hours is advisable. This prevents bladder distension and eliminates repeat catheterization. It need not interfere with early ambulation.

SUMMARY

1.—The indications, contraindications, advantages and disadvantages of vaginal hysterectomy are discussed.

2.—A relatively simple technic for vaginal hysterectomy and associated pathology is presented.

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The Surgical Treatment of Irradiation Injuries

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Changes in the skin and other tissues due to exposure to x-rays or radium were early recognized as both valuable and dangerous: valuable in the treatment of disease, and dangerous in that changes may be set up in the tissues which in themselves may be as harmful as the condition treated. Because of these potentialities emphasis has been focused on two aspects of irradiation therapy: clear cut indications for such therapy and accurate methods for measuring dosage. The general effects of irradiation have received more and more attention, both because of the general effects of irradiation on patients receiving therapy and because of the demonstrated effects of atomic bombing. I am not concerned with these latter aspects at this time. I shall also leave out of consideration the deep effect of irradiation upon such tissues as the stomach and rectum and confine my discussion to the influence of x-radiation and radium irradiation upon the skin and subcutaneous tissues as they

have been exhibited in patients who have applied to us for treatment.

In clinical series of cases studied attempts to correlate the amount and type of irradiation with the changes found have been discouraging. Accurate data on these patients have been impossible to obtain. The patients themselves have only hazy knowledge of the number and possible duration of the treatments and whether or not x-ray or radium was used. Also in a large group of the patients (fully a third) the dosage would be impossible to calculate since it has been largely adventitious in repeated minimal exposure over a period of years occurring among professional personnel.

Patients suffering from irradiation dermatitis, necrosis and carcinoma fall into five significant groups. The *first* and largest group, comprising about 50 per cent of the patients, is made up of individuals who have been exposed to often repeated small adventitious doses of x-radiation or radium irradiation or to repeated small therapeutic doses over an extended period of time. A *second* group is made up of patients who have received a massive over-exposure in one or a few closely spaced sessions. A *third* group is com-

Presented before the 107th annual meeting, Illinois State Medical Society, Chicago, May 10-12, 1948.

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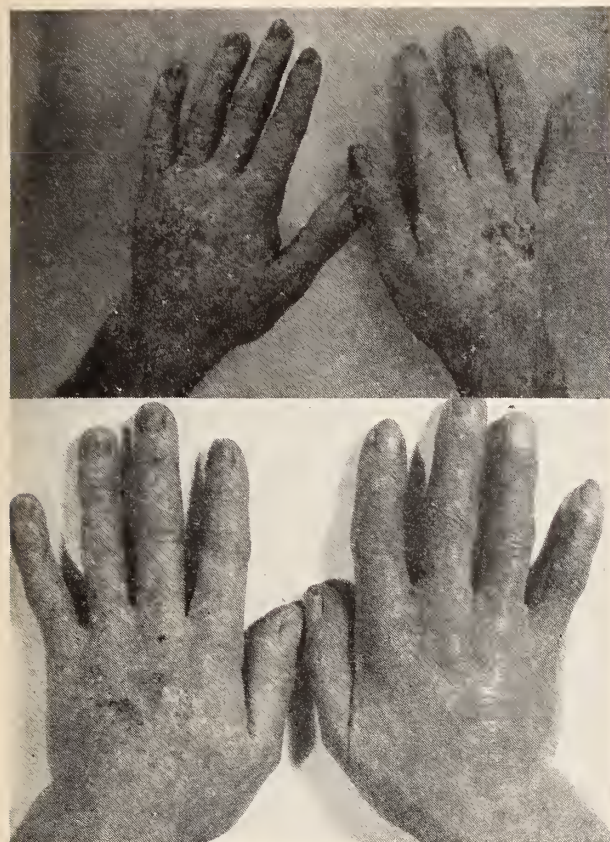


Figure 1

Dermatitis of both hands subsequent to irradiation for eczema. Above both hands before excision and split graft; below the right hand has been operated upon. The left was subsequently operated upon. Sections showed radiation dermatitis in skin from both hands with carcinoma also in that from the right.

posed of patients with various lesions or conditions of the skin treated by irradiation for purpose of destroying these lesions or of destroying skin appendages (hair). A *fourth* group is made up of patients with lesions present or suspected of being present in the tissues and are given treatment for these lesions with a technic planned to protect the overlying skin. A *fifth* group is composed of patients treated for acute or chronic infection of the skin.

These groupings are loose and imperfect and with more information on dosage and spacing of dosage certain cases would shift from one group to another, but the broad lines, upon which this grouping is based, I believe to be essentially sound.

Group I.—In this group we have placed those patients who have been subjected to frequently repeated small adventitious doses of irradiation or to small therapeutic doses over an extended period of time. Two large classes of individuals come into this category: *a.* professional per-

sonnel, doctors, dentists, roentgenologists, x-ray and radium technicians who are exposed to irradiation as an occupational hazard; and *b.* patients with cutaneous conditions for which frequently repeated or extended treatment has been given. Group 1 is all the more worthy of special classification since over 50 per cent of these patients develop squamous cell carcinoma in the dermatitis and in none of these did the carcinoma develop from a pre-existing carcinoma but solely on the basis of irradiation.

The doctor, the professional roentgenologist, the radiological technician and the dentist all have the same type of exposure, namely to small often repeated adventitious doses in the course of their professional activities. These exposures, none of which in itself would be sufficient to cause changes in the skin, cumulate over the years and reaction comes late, not as an acute process but as a chronic dermatitis, 5, 10, 20 or even 25 years after the initial exposure, and often years after all exposure has ceased. In the case of the doctor as opposed to the professional roentgenologist or radiologic technician there is a history of fluoroscopy without adequate protection, or fracture reduction under the fluoroscope, during the course of a busy practice. Associated with this is the usual exposure of the hands to other trauma in the course of general practice, especially surgical scrubbing along with chemical irritants frequently used in conjunction with surgical preparation. Often these latter are blamed for the trouble and they certainly may contribute to the dermatitis in the already irritated skin.

The professional roentgenologist and technician, and to this group is added also the gynecologist who uses considerable radium in his practice, give much the same type of history in that their hands receive daily tiny doses of irradiation probably even smaller but more frequently repeated than in the case of the general practitioner. This group which was the earliest described historically is now becoming much smaller with the better protection now used.

The dentist, who seems to be a very frequent victim, exposes his hands in just one manner, that is in holding the film in the patient's mouth while taking dental x-rays. This leads to fairly specific distribution of the lesions on the hands because of the definite areas of exposure. It is my feeling that many cases of novacain derma-

tis among dentists are probably irradiation dermatitis. Certainly a dentist with dermatitis should be suspect to irradiation dermatitis until proven otherwise.

In all of the patients just mentioned changes appear late (1 to 25 years) after the initial exposure. These changes start on the hands as a roughening and thickening or occasionally thinning of the skin, which becomes dry and scaly. For a while this process responds to oily and greasy preparations but pretty soon the scaliness becomes more marked, keratoses develop, the nails become brittle and striated and discolored. In the case of doctors and professional radiologists, the dorsal surfaces of the hands and fingers are involved. Usually both hands are affected, the left more severely than the right. In the case of the dentist the changes develop most often on the thumb, index and middle fingers with the severest lesions on the index. Along with lesions on the dorsal surfaces of these fingers there are changes on the radial and volar surfaces of the index and middle fingers. In about one half of the dentists both hands are affected; where only one hand is involved it is more likely to be the right than the left.

Sometime after the appearance of the keratoses and telangiectases there appear lesions of more pathologic significance. A warty growth may make its appearance in one or two or more areas, there may be a peculiar subungual or periungual infection, or there may develop a crack or fissure in a previously present wart. A wart or keratotic lesion may break down and ulcerate. While such lesions are not necessarily carcinomatous that is the way in which carcinomas usually start.

Characteristic of this group of patients also is the progressive nature of the disease. The dermatitis and associated warts, keratoses and ulcers do not appear all at once but new patches appear from time to time and fresh keratoses and warts spring up in skin that previously appeared normal, making proper eradication of the process difficult. Carcinoma is not necessarily evident clinically before operation. It may make its appearance quite early in a patch of keratosis, wart or ulcer; it may not develop for many years (as long as 33 years) after the first keratotic lesion is noted. It may be present not in one spot but in many, and like the

dermatitis it may develop in new spots years after the first lesion has been removed. Hands, the seat of a chronic radiation dermatitis, must be carefully watched until all irradiated tissue has been removed.

A group of patients which fall into this category of repeated irradiation are those with various types of dermatitis for which irradiation is used therapeutically. It is not always clear whether the irradiation alone has been sufficient to cause the late reaction or whether irradiation added to the irritation of the original dermatitis has turned the balance. These patients have seldom received the long drawn out exposure characteristic of the professional group, although many have had many courses of treatment spread out over a period of years. The development of symptoms and their tendency to develop malignant changes closely parallels the course of the professional group.

The conditions for which irradiation has been used include the four common types of skin diseases: ringworm, eczema, acne and psoriasis, as well as various undiagnosed types of dermatitis, chemical dermatitis, dermatitis in burn scars, etc. Here also I have included two instances of pruritis ani, one of which was irradiated with a frequency reminiscent of the professional exposure of a roentgenologist.

The location of the dermatitic lesions varied greatly; the hands and feet, the scalp, the chest and abdominal wall and the perianal skin were all represented.

Carcinoma has developed in 50 per cent of these dermatitic irradiated lesions, and just as in the professional group the carcinoma followed the irradiation dermatitis and was not a part of the pre-existing condition for which the therapy was given.

The irradiation dermatitis comes on at varying intervals following treatment, occasionally as an acute reaction following the initial treatment, at times after the second or third course of treatment. As in the professional group the dermatitis may not make its appearance for several years after the start of the irradiation, although the interval is not as great as a rule as among patients exposed only to adventitious rays. It seems to require a certain amount of irradiation to cause these changes, and this amount is delivered more rapidly when given as



Figure 2

Chronic irradiation dermatitis following fluoroscopic removal of foreign body two years previously. Figures show hand before and after excision and split graft. Section showed chronic degenerative dermatitis, no carcinoma.

therapy than when received as adventitious exposure. The important factor seems to be that of stretching out the exposure over a long period of time. This "chronic" exposure present in both professional personnel and patients with dermatitis seems to be the deciding factor in the particular reaction seen.

Group II.—In this group belong patients who have had a definite over-exposure in one or a few sessions. The patients I have seen in this group have been mostly victims of fluoroscopy. This is not a fair representation of the acute post-radiation reactions because we see few acute burns, the patients coming to us for repair of defects or for removal of residual dermatitis. Most acute fluoroscopic injuries, in our experience, have followed search for foreign bodies in the hand or forearm, but we have seen chronic ulceration following a fluoroscopic examination of the gastrointestinal tract 15 years previously. It is usually the patient who suffers from this over-exposure, but the doctor may be the victim also. In this group of patients is also included a munitions worker who examined fuse caps for eight hours a day for a period of three days (quitting because something went wrong with the machine), and who was at the height of an acute reaction some ten days after the termination of the exposure.



Figure 3

Chronic ulceration following radium treatment of hair follicle infection three years previously. Figure shows the hand before and after excision and split graft. Sections showed chronic ulceration and irradiation injury, no carcinoma.

The acute reaction appears in a week to ten days after the exposure and looks and acts like a severe thermal burn, but is more painful and continues to be painful for a longer time than an acute fire burn. The acute process may subside under proper care or the ulceration may be so severe that amputation of a finger may be necessary. At times healing may be hastened by applying grafts to the granulating surfaces following removal of the sloughs. After the acute reaction has subsided the skin cracks and breaks down easily and a chronic painful dermatitis or ulceration is likely to develop following minimal traumas. Malignancy may occur as a late change in this vulnerable skin especially if a chronic dermatitis is not excised. However this is not a frequent occurrence following the acute burn.

Group III.—A third group of patients is made up of those subjected to destructive irradiation for some cutaneous tumor or for purposes of permanent destruction of hair follicles. The skin tumor group is made up of a variegated mixture of benign and malignant neoplasms, warts, tumors of unknown type, birthmarks, etc. In many instances we have little or no clue as to

the exact nature of the original tumor, in other cases remnants of the wart or basal cell carcinoma or hemangioma are still found to be present in the area of irradiation dermatitis or ulcer.

In this group of patients malignancy (usually a basal cell carcinoma) is found in the excised tissue in about one third of the specimens examined. It is apparent however that in most cases the malignancy was present before irradiation was started and was not the result of the treatment. In a few instances however it seems probable that carcinoma (squamous cell) was not originally present but arose in the irradiated skin as a direct effect of the irradiation.

Irradiation of plantar warts has caused a tremendous amount of trouble for many patients and many surgeons. While undoubtedly some warts are cured by irradiation, a few experiences with the treatment of irradiation ulcer of the sole or heel soon dampens one's enthusiasm for this form of treatment. This is especially true if, as may happen, the wart is not a wart at all, but the expression of some orthopedic condition. The replacement of the skin of the sole is never satisfactory at best and if the surgeon must also contend with the devitalized irradiated skin the problem is much more difficult.

Group IV.—This group comprises patients treated for some deep lesion, for example, following radical amputation of the breast for carcinoma, for pelvic malignancies, etc., and for such processes as hyperthyroidism, sciatica, tuberculous glands of the neck, etc. Here we can assume that precautions were taken to shield the skin by cross fire, varying ports, and by other methods best known to the radiologist. In this group of patients malignancy is quite rare. Of ten patients we have treated there was but one who showed a carcinoma in the skin. In this instance it was a squamous cell lesion in the skin of the neck coming on in a radiation dermatitis 23 years after the treatment. It is quite possible that the long duration of the dermatitis and the tuberculosis nature of the original process were significant factors in this case.

The development of dermatitis or the breakdown of scars comes on usually a few years

after the irradiation, but may be delayed for 10 or 15 years and may follow a trauma or infection in the area. In one instance an ulcer followed in the wake of a carbuncle of the neck close to the scar of an area of irradiation for sarcoma of the tonsil. In another the anterior abdominal wall failed to heal following a pelvic exploration in a patient who had previously received irradiation for pelvic malignancy.

Group V.—In this group we have placed patients who have had acute or chronic infections of the skin treated by irradiation. The acute processes have usually been complicated affairs associated with trauma and possibly overtreatment, e.g., fishhook injuries, wood-splinter injuries, gunshot wound, etc. The chronic infections have been tuberculous processes, one a tuberculous nodule of the skin, the other a lupus. In one instance, the patient with a tuberculous nodule of the skin, a carcinoma developed. This is not surprising in view of the bad reputation of irradiated tuberculosis of the skin.

PATHOLOGY

The pathologic changes in irradiated tissues explain the great chronicity of the process, its susceptibility to trauma and infection and its poor healing properties. The tendency to undergo malignant change seems also to be traceable to vascular and connective tissue changes rather than to any specific action on the epidermis itself. The most significant lesions present are an obliterative endarteritis, a perivascular infiltration, and great collagenous thickening of the corium. The thinned out or irregularly thickened epidermis is thought to be directly referable to the nutritional disturbances occasioned by poor vascularity. The vascular narrowing and obliteration are present throughout a wide area and lead to the successive development of changes over periods of years even in regions where at first no gross damage is apparent. These changes inherent in irradiated tissue; the lowered vitality of the tissue; the chronic infection and the difficulty of determining the extent of involvement make plastic repair difficult and healing poor.

TREATMENT

The surgical management of chronic irradiation dermatitis is complete removal of all involved skin and plastic closure of the defect. This is seldom a simple problem, however.

In the case of the doctor with irradiation dermatitis it may necessitate the removal of all the skin from the back of one or both hands. It not infrequently happens that after excision of all the visibly affected skin new areas of dermatitis develop in what appeared previously to be normal skin. In these patients multiple operations are often necessary. Added to the uncertainty as to the amounts of skin necessary to excise are the poor healing properties of the tissues, which must be carefully nursed along for some time after operation. Free grafts do not take as well on these surfaces as on other types of freshly dissected surfaces, not just because of the poor blood supply but also because of the ever present infection deep in the subcutaneous tissues.

The method of repair of the defect left by the removal of diseased skin will depend on the site and depth of the lesion. In very few instances it may be possible to close defects by suture; most often some sort of graft will be needed. Where bones and joints and tendons are exposed it will be necessary to use a pedunculated flap since free grafts do not take well on such surfaces. Where feasible it is good practice to shift flaps from the side into the defect and to cover the donor defect with a split graft.

Replacement of the skin of the hand, either palmar or dorsal, can be accomplished in most cases with split grafts, since excision rarely requires exposure of bone or tendon. The dorsal tendons are usually found, after dissection, to be covered with thin areolar tissue over which a free graft will grow quite well. The use of silk overties to hold a thick fluffy dressing snugly in place will almost insure the take of free grafts. Free full thickness grafts are very useful on the hand providing the diseased skin can be removed before infection has become established, i.e., before ulceration and cracking appear. When ulcers and chronic infection are present a free full thickness graft is almost certain to slough. Occasionally a flap will be required on the hand, particularly in the case of deep dorsal radiation injuries.

Where deep invasion of the hand has occurred from a malignant lesion, excision follows the same general pattern as for squamous cell carcinoma elsewhere. It is not unusual for one or two fingers to require amputation but one

does not often have to amputate a hand or forearm unless the patient has applied very late for care. Removal of the associated nodes is indicated in all cases where deep invasion is present and where glands are palpably enlarged. It does not seem necessary to perform a radical node dissection in most cases with early carcinomatous changes since it is the experience of surgeons dealing with these lesions that the carcinoma remains localized a long time, probably because of blocking of lymphatics by the dense collagenous tissues typical of the condition.

Roentgen dermatitis following irradiation of plantar warts or calluses may be treated by excision and free graft provided the lesion does not overlie a weight bearing surface. If a weight bearing surface is involved it is often possible to shift skin from a non-weight bearing area over the defect and cover the donor site with a free graft. Where such a procedure is not possible a pedunculated flap will be required.

The problem of repair after excision of the parianal skin is a difficult one. In those instances we have had opportunity to treat we have either laid in split grafts or shifted lateral flaps into the raw surface following dissection. In one case a colostomy was performed to divert the fecal stream from the operative area while the split grafts were healing. I am not sure that this was a necessary precaution.

The same general principles are applicable to any anatomic area affected by the disease. No region of the body is immune. The face, the neck, the axilla, the abdominal wall, the back and sacral area are all represented in the series we have treated. Each region presents certain special problems of its own, but the basis of care is the same.

Methods of treatment other than surgical excision offer little more than temporary alleviation, while some types of treatment cause actual harm. The acute x-ray burn should not be attacked surgically. Various medicaments have been used to control pain and promote healing. It is my feeling that the acute burn should be treated as acute thermal burns and that if sloughing occurs the denuded area should be covered early with a split graft.

In the case of chronic dermatitis salves and greasy ointments will help to keep the skin smooth, add to the comfort of the patient and

may control itching. They may also add a certain amount of protection, but they do not cure the condition. Various types of irradiation have been recommended for the treatment of irradiation dermatitis. In the early days it was thought that radium would cure roentgen dermatitis. However, this practice has been all but given up. Nevertheless a few of the patients we have received for care have had radium treatment for a roentgen dermatitis usually with unhappy, and always with unsatisfactory results. The use of a vaseline ointment containing radium emanations has been very extensively used and there are many reports in the literature concerning it. My experience of it has been confined to patients who have come for surgical care after having had this preparation used on their dermatitis. None of these cases has been cured by the ointment, some have noted little or no effect, one claimed the itching was relieved following its use. Several of the severest cases we have had to care for have been previously subjected to this treatment with very unhappy results. It does not seem logical to apply one traumatizing agent to cure the effects of a previous irritant. The great sensitivity of these lesions to all types of irradiation, ultraviolet, sunlight, infrared must be kept in mind in these patients. In several cases we have seen ultraviolet irradiation lead to a very severe acute reaction following which the dermatitis continued with even greater intensity. Two patients, one a physician, the other a dentist, suffered an acute breakdown of hand lesions while on a South American cruise during which they literally "drenched" their hands in sunlight. Infrared has been known to stir up so acute a reaction that amputation of an arm was contemplated.

RESUME

In resumé, irradiation injuries of the skin and subcutaneous tissues may be grouped into five large groups depending upon the nature of the irradiation to which the patient has been

subjected. In Group I are those patients subjected to frequently repeated small doses of irradiation over a long period of time. This group includes doctors, dentist, radiologists, radiological technicians and patients with chronic skin disease. Fully 50 per cent of the patients in this group have shown carcinoma in the excised tissue. In Group II are patients who had received an overdosage of irradiation in one or a few closely spaced exposures and have exhibited an acute burn followed by a chronic dermatitis. Malignancy is rare among patients in this group in our series of cases. Group III is made up of patients who have received destructive irradiation for cutaneous tumors of various sorts, both benign and malignant, or for destruction of hair as a cosmetic procedure. Few of these cases develop carcinoma on the basis of the irradiation dermatitis, while a fair percentage of them still have the original lesion. Many of them have traded a small, easily removable lesion for an extensive ulceration or a chronic dermatitis. Group IV is made up of patients who have received deep irradiation for various conditions, e.g., post-operative treatment following radical mastectomy, or for such diseases as hyperthyroidism. These patients have rarely exhibited malignant degeneration in the diseased skin. Group V is composed of patients who have had infectious processes treated with irradiation. The acute infections have not exhibited carcinomatous changes, but of two chronic tuberculous lesions of the skin one broke down into a squamous cell carcinoma. Chronic changes in the skin and subcutaneous tissues, especially changes in the blood vessels account for the great chronicity, the tendency to recurrence and to malignant changes. Treatment consists in removal of all involved skin and plastic repair of the resultant defect. Further irritants, particularly irradiation of any sort, must be avoided since they increase the severity of the process and delay surgical repair.

154 E. Erie St.

Treatment of Infection of the Frontal Sinuses and its Complications

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Within the last fifteen or twenty years we have witnessed tremendous changes in our conception of the causes and treatment of sinus disease. We have of course for a long time realized the difficulty in differentiating between disease of the sinuses and that of the immediate neighboring organs. Then too allergic manifestations often simulate infectious sinusitis closely, or the two may be present in the same individual. Also intracranial disease and systemic disease, such as hypertension, etc., must be ruled out. Eye disorders must always be considered. It will at once be realized that only by the most careful and painstaking examination are we able to make the proper diagnosis.

This paper has to do with frontal sinus infection with bone involvement and intracranial complications. I will try to discuss it: 1. Treatment of infection of the sinuses without invasion of the frontal bone itself. 2. Treatment of infection of the frontal sinus with bone involvement. 3. Treatment of infection and bone involvement and in addition, invasion of the cranial contents such as localized meningitis with or without abscess of the brain.

The cases included in this paper are cases seen since 1944.

It is true that many cases of acute sinusitis make recovery without seeing a doctor. There are however a few who come in because of the pain which accompanies this condition and whose infection responds rather quickly to treatment even though they may have a mild inflammation of the bone. Then in a smaller group, usually neglected cases, there is marked evidence of osteomyelitis, sometimes including a supra-orbital fistula. Occasionally these have evidence of brain involvement of which more will be said.

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Presented at the May 17, 1948 Meeting of the Adams County Medical Society, Quincy, Illinois.

In practically all cases of infectious frontal sinus disease there is a history of onset of a cold with pain in the region of or above the eye. This pain usually is severe. It may be so severe as to require large and frequent doses of morphine. It has a peculiar characteristic in that it comes on about the same time in the early morning every day. It was on account of this peculiar characteristic that the Aborigines, who told time by the sun, referred to it as "sun pains". With swelling in the nasal mucosa, drainage from the sinus is blocked, hence the pain and the probable invasion of the bony walls of the sinuses. It frequently occurs that no pus is visible until the mucosa is shrunk up. Whereupon there is a profuse discharge and prompt relief of pain. Formerly this sort of treatment was required for two or three weeks for relief of the sinus infection. With the use of the sulfonamides and/or penicillin the course of the acute painful stage has been much shortened and return to normal greatly facilitated. Usually the ethmoid and maxillary sinuses are at the same time involved. When the bone is acutely tender and there is swelling of the periosteum the course of the disease is longer and the problem is at once more serious. Many instances are recorded in which early osteomyelitis without abscess treated with the sulfonamides and/or penicillin have made complete recovery. Whereas in the days before we had these remedies successful treatment was not so readily accomplished.

Many individuals seem to prefer to suffer it out with their pain rather than go to a doctor with the result that they sometimes develop osteomyelitis and abscess. When these conditions are present surgical drainage must be carried out and chemotherapy continued. It has been established beyond question of a doubt that neither penicillin or sulfonamides alone will evacuate or cure an abscess. Furthermore the administration of the above mentioned remedies

must be carried out for a longer time than is ordinarily thought necessary and in larger doses.

The x-ray picture is a very great assistance in making the diagnosis of osteomyelitis of the frontal bone. The history and the physical examination are extremely important. Evidence of swelling over the sinus and inside the nose are important. Of special interest is the appearance of the mucosa around the naso-frontal duct and by posterior rhinoscopy around the middle meatus. There is swelling of the periosteum, obliteration of landmarks and with extreme tenderness to touch over the sinus. The x-ray film shows haziness over the frontal sinuses sometimes with obliteration of the borderline of the sinuses. When the disease has spread past the frontal sinuses into the bone, this bone has a moth eaten appearance and the skin of the scalp sometimes is edematous and raised up. Sometimes one of these cases will develop a fistula along the orbital ridge, usually at the inner canthus but occasionally at the outer canthus. I suspect you have all seen individuals with such a sinus infection which has drained for a long period. Pain is usually reduced when a fistula forms, hence the delay in seeking relief. This does not mean that the spread of infection has been arrested and with all acute colds, pain is likely to be severe and invasion of deeper structures is likely to occur. Regardless of patient's fear of having something done for this there is only one remedy, namely, radical operation. It is my feeling and practice when operating on one of these cases to put away all ideas of cosmetic surgery because I feel we are operating to save the patient's life and if deformity is sufficiently grave afterward to warrant, it can be corrected. I therefore do not temporize with intranasal surgery of any kind but prefer to make a wide incision around the orbit and if necessary up through the middle of the forehead so the entire bone can be exposed. Apparently with operation plus penicillin we are able to cope successfully with osteomyelitis of the frontal bone even though it has invaded the diploe of this bone. Occasionally these people come in with frontal sinus infection plus bone invasion and with brain abscess. If we are to accomplish the desired results it is necessary that we recognize their condition promptly and be governed accordingly. Frontal sinus disease and osteomyelitis is not so difficult to recognize

but brain abscess is not so easy. One reason for this is abscess from this cause usually is in the frontal lobe which in itself is notoriously hard to diagnose and localize. One or two of the outstanding symptoms which have served me well in differentiating frontal lobe abscess are failure to respond readily to ordinary questions we have in every day usage. For example, what is this object; if you show them a watch and ask what time it is, instead of responding promptly they will hesitate before they give an answer as if they had failed to understand and then answer correctly. Furthermore they seem to be stuporous and if permitted will sit up in the examining chair and drop off to sleep which according to their family they have done recently. In addition to this they are extremely irritable and fussy. These symptoms plus the positive findings of edema of the periosteum, tenderness of the bone, a fistula or not, discharge of pus from the naso-frontal duct and a hazy film, in my mind, usually means infection of the frontal sinuses with involvement of the bone, with or without frontal bone abscess.

As far as I know the only treatment for this is complete removal of the diseased bone, regardless how for it takes us, with huge dosage of penicillin for a period of at least two or three weeks and probably sulfonamides. If or when the question of disfigurement after operation arises, we are well within our rights if we simply state that we will be guided in the extent of our operation by the findings at operation, realizing full well that this is in an effort to save the patient's life rather than his looks.

The cases which I will show are those with extensive osteomyelitis of the frontal bone and three with abscess of the frontal lobe.

In summary — the diagnosis of osteomyelitis of the frontal bone is based on the history and the signs and symptoms including the x-ray films. The sulfonamides and penicillin will cure many cases in the earlier stages of infection of the sinuses and even in some cases in which the bone already is beginning to be involved. However, once an osteomyelitis is established, I feel that radical surgery is definitely indicated and certainly this is true when there is any evidence of meningitis or brain abscess. Early and thorough going surgery, plus penicillin and sulfonamides for a protracted period will save



Figure 1. (Case 1) X-ray films show bone involvement.

the lives of people who formerly died with this disease.

Case Report: 1 N. B. — A forty five year old man was first seen on May 20, 1946. For about two years he had frequent head colds and heavy nasal and post nasal discharge. He had had an antrum window and middle turbinate removed and some of the ethmoid cells and a submucous resection of his septum with intra nasal opening of the frontal sinus in 1941. One year later more ethmoid cells were removed. From then on through 1942-43-44-45, he had recurrences with an abscess above the eye which was incised and in November, 1945 the frontal sinus opened. When I first saw him in 1946 he had, as will be seen from the x-ray films (Figure 1), an extensive osteomyelitis of the frontal bone. He was promptly operated and all the bone was removed without regard to deformity. To my surprise he had very little deformity. He made a complete recovery and has remained well since.

Case Report 2 L. T.: — A 32 year old farmer came into my office on October 25, 1946. He was in a confused mental state with drowsiness. The history as given by a member of his family was as follows:

Patient had a recent head cold and was treated by a local physician. The past few days he complained of pain over the left frontal region and around his temple, which was worse when in a sitting position. He has had "sinus" trouble for about eight years, the last attack was in September, 1946. During the past week he has had several unconscious spells.

On examination the patient was found to be in a vague, confused state and slow to respond. There was no swelling over the left brow. There was pus in the left middle meatus. X-ray of sinuses revealed the left maxillary and the left frontal to be hazy (Figure 2). The left maxillary sinus was irrigated and the return was positive for pus — four plus. Nasal smears were made which showed many polymorphs and many eosinophils. Blood count: WBC. 19,200 — Seg. 75 — Stab. 1 — Lymphocytes 20 — Mono. 4. Patient was sent to Dr. Ernest Sachs for neurological study and his report was as follows:

Both eye grounds are abnormal. They show early swelling. Left pupil is larger than the right and slightly irregular but react to light. Reflexes in left are more active than in the right and there is definite Hoffman on the left. Reflexes in the lower extremities are active but pathological. No ankle or patella clonus. Abdominals are somewhat difficult to elicit but equal on both sides. No Romberg. On pronation and supination, both well carried out. Patient probably has an intracranial infection. Recommended 50,000

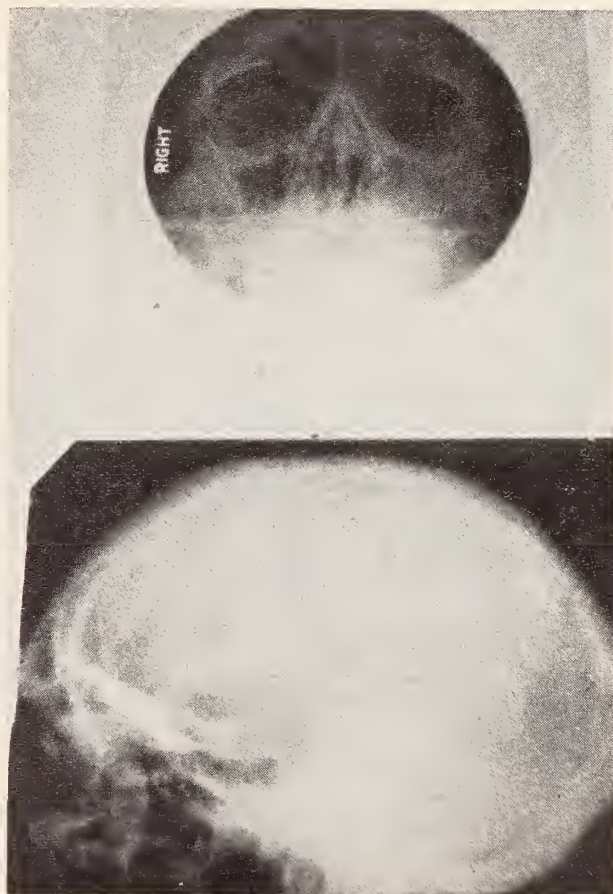


Figure 2. (Case 2) X-ray films show frontal and maxillary sinus infection with evidence of bone involvement in the frontal.



Figure 3. (Case 2) Photograph of the patient six months after operation.

units of penicillin every three hours, intramuscularly; Stero film of both sides of head and stero in posterior anterior position. Wasserman and Kahn.

Patient was admitted to the hospital and above recommendations carried out. On November 1, 1946 an external frontal operation was done and widespread osteomyelitis of the frontal bone was found. The external plate of the frontal sinus was removed. He was put on penicillin for a few days but his progress was not satisfactory in that he was still mentally obtunded. On November 21st the wound was reopened and the posterior wall examined. Through a tiny jagged hole it was seen that pus was pulsating. This bone and the entire frontal bone back to the parietal suture was removed. It came away very readily because it

was so soft and immediately a hole the size of a lead pencil was found in the dura. As soon as a small amount of bone was removed, pus shot through under pressure. At least 200 cc. drained out before it ceased pulsating. When the pus had quit coming through, gel foam was placed over the opening. The skin was pulled back into position, with a gauze drain saturated with penicillin under the skin flap. Within twenty-four hours his mental condition had returned to normal. After two weeks of intramuscular penicillin he was so well that he was allowed to go home. He has reported for check up, the last time being March 12, 1948, at which time he had gained fifteen pounds of weight and seemed perfectly well. (Figure 3).

Case Report 3 W. C.: — A 30 year old white male came to my office on November 17, 1945, with a history of having had a nasal discharge of yellow pus for as long as he can remember. Several years ago he contracted a severe head cold and suffered frontal headaches. His doctor treated him for "sinus trouble" for a period of ten months and finally recommended a frontal sinus operation but he did not have it done. A few weeks before the patient came into my office he again suffered severe frontal headache and noticed a slight swelling over the left brow.

On examination there was a slight swelling over the left brow. His nose was full of pus and polyps. Smears of this material were stained and examined and showed numerous polys with nearly every cell an eosinophile. X-rays of sinuses showed a bilateral maxillary sinusitis and evidence of osteomyelitis of the frontal bone (Figure 4). Sinuses were not irrigated because of his acute infection. He was placed on sulfamerazine and penicillin therapy. There was considerable improvement the following day and the antrum was irrigated. Large amounts of thick yellow pus was recovered. Sulfamerazine and penicillin therapy together with irrigation of the antrum were continued daily until December 4, 1945, when increased pain and swelling was noticed over the left brow. Aspiration of a possible abscess over the left brow



Figure 4. (Case 3) X-ray film shows involvement of frontal sinus and bone.



Figure 5. After operation.



Figure 6. After plastic operation for removal of scar.



Figure 7. (Case 4) X-ray evidence of involvement of frontal and maxillary sinus with frontal bone involvement.

was attempted and 4 cc. of pus was recovered. Cultures of pus showed strep. He was admitted to the hospital for operation.

Operative Note: An incision for a left external frontal, plus a line up the middle of the forehead, was made. When the skin and periosteum over the forehead was reflected an abscess, subdural, the diameter of the cross section of a hen's egg was found. Further inspection revealed a fistula about 3/4 of an inch long through the posterior plate. The opening through the posterior plate was enlarged until healthy dura appeared. Penicillin soaked drains were left in place and a pressure dressing applied. The patient made an uneventful recovery and was discharged from the hospital on his twenty-fourth post-operative day (Figure 5)

On June 1, 1946, a plastic operation was done to his forehead. The patient was last seen by me on March 9, 1948 and there has been no recurrence of his old trouble. (Figure 6)

Case Report 4 C. S.: — September 16, 1946 a 42 year old man came in with pain and swelling of his right eye so that it was closed. There was marked tenderness in the supraorbital region and with pus from the middle meatus. X-ray films showed an osteomyelitis of the right frontal bone (Figure 7). On the second day a right external frontal operation was done. The entire bone was the site of an osteomyelitis. The front wall of the sinuses was removed and with penicillin in dressing and intramuscularly he made a complete recovery. He has been in for check up from time to time and he is still well.

It is of interest to note that this man who traveled with an amusement company had seen several doctors throughout central Illinois, all of whom had advised operation but he kept going for about a year and a half before he finally came in for operation.

Case Report 5 C. S.: — July 16, 1946, a 63 year



Figure 8. (Case 5) X-ray shows disease of left frontal with circular shaped sequestrum in frontal sinus.

old female came to my office with a huge red tumor over the left frontal sinus. At this time she reminded me that I had done a skin graft in her left frontal sinus in 1922 and she had been well from that time on until a few days previously when getting down a can of beans from a high shelf in the kitchen where she was employed as a cook, a can toppled from the top shelf and hit her on the forehead. It was evident from the x-ray film (Figure 8) and from examination that she had an abscess as well as a fracture of the anterior wall of the frontal sinus. This was opened with an incision beneath the brow and the sequestrum removed with of course a huge amount of pus. I was delighted to find that the skin graft was still in position and while swollen so that the pus could not drain into the nose, it was apparently functioning. A penicillin soaked drain was pushed down into the nose where it remained for three or four days. She was given large doses of penicillin and made a complete recovery.

Case Report 6 R. M.: — January 7, 1948, a 17 year old male reported to my office with a history of having had a cold which seemed to have settled in his sinuses. With local treatment he got steadily worse and his left eye swelled shut. He had some sort of local

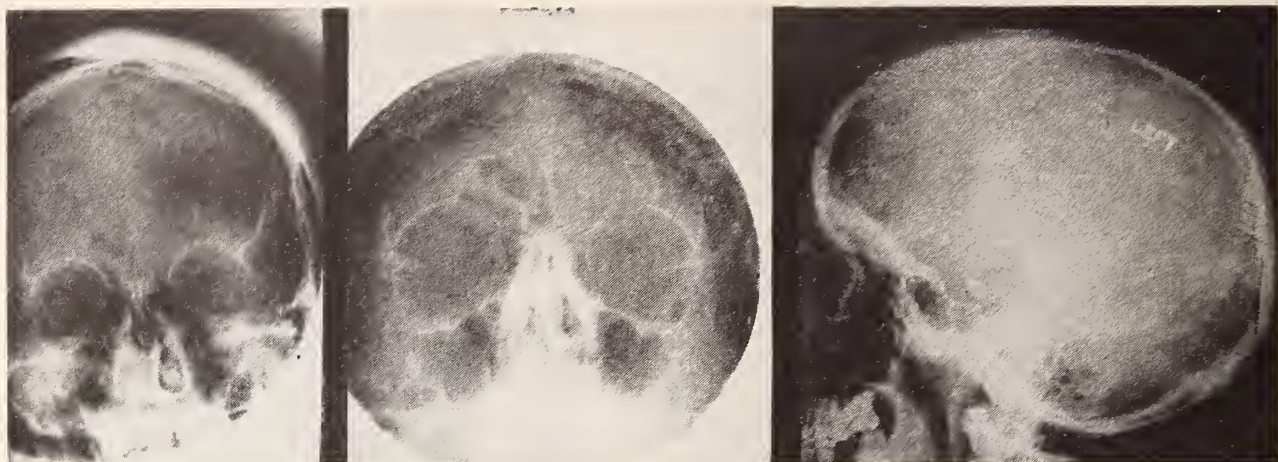


Figure 9. (Case 6) X-ray films show involvement of the left frontal, ethmoid and entire left frontal bone.

operation through the nose without improvement. The entire left side of his face and the skin over his skull on the left side was swollen. He had two puncture wounds, one over the left orbit and one over the left temple. He did not have much pain, although there was soreness on pressure and pus in the middle meatus. X-ray pictures show involvement of the left maxillary, ethmoid, frontals and the frontal bone (Figure 9). When I saw him for the first time on January 7th, he showed evidence of osteomyelitis of the entire frontal bone. The skin over the entire frontal bone was raised up and had all the evidence of osteomyelitis underneath. He was promptly sent to the hospital and was given huge doses of penicillin and sulfadiazine and scheduled for operation on the following day.

At operation, I found the entire frontal bone on the left side and most of the frontal bone on the right side was necrotic, even down to the orbit and zygomatic process. He had an abscess in the left frontal lobe about the size of a lemon. The opening to this abscess was treated with gel foam after it quit draining and his wound was closed. This of course was an extensive operation but the patient stood it well. We continued the penicillin for about two weeks. His wound healed practically by first intention and he got well without any symptoms of continuation or recurrence of his abscess. He has been in for check up about once a month.

Case Report 7 E. M.: — A 42 year old male farmer came to my office on April 15, 1948, with a history of having had "sinus trouble" nearly all of his life. In February of this year, he contracted a severe head cold. A few days later he suffered with pain, swelling and redness over the right frontal region and down into

the orbit. His physician treated his nose locally and gave him an injection of penicillin. Swelling continued, with the result that an abscess beneath the right brow ruptured spontaneously and drained yellow pus. This has continued until the present time. He had been getting 300,000 U. penicillin in wax and oil every other day from the onset of his trouble until the day before he first came to me. On examination, there was redness and swelling over the right frontal sinus, with a fistula in the supra-orbital ridge. This area was tender to pressure. The middle meatus was filled with pus and polyps which looked like allergy. Smears of this pus were stained and examined and showed numerous polymorphs, with nearly every cell and eosinophile. X-rays of sinuses showed evidence of osteomyelitis of the right frontal bone. Patient was admitted to hospital with operation scheduled for the following day.

Operative note: — The usual incision was made for a right external frontal operation. There was a fistula in the right supraorbital ridge and the bone was necrotic and soft. The entire frontal wall of the frontal sinus was removed. The sinus extended across the midline and was filled everywhere with granulation and pus. This was cleaned away until healthy bone was encountered. Gauze drains saturated with penicillin were left in place. Orders were given for 300,000 U. penicillin in wax and oil every day. The patient made an uneventful recovery and was discharged from the hospital on his sixth post-operative day. He was given orders to report to his physician at home for observation and injections of 300,000 U. penicillin in wax and oil, every other day, for one week.

A recent report from patient states that he has been well and has had no evidence of return of his old trouble.

Fluorine and Dental Caries

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Numerous investigations during the past seventeen years have demonstrated the important relationship between minute amounts of fluorine and dental health. The general conclusions are now commonly accepted and the gamut of professional thought ranges from excessive through optimal, to deficient intakes of this element. Too much fluorine in a domestic water results in the enamel deformity known as endemic dental fluorosis (mottled enamel); too little, a high dental caries experience. Between these two extremes, however, lies a concentration which may profoundly influence the dental practice of tomorrow, e. g. about one part per million of fluoride (F). Populations using domestic waters containing approximately this level are characterized by unusually low dental caries experience rates; coincidentally this concentration is not enough to produce mottled enamel. Within a few years experimental studies like that now being conducted at Grand Rapids (Mich.), Newburgh (N. Y.) Evanston (Ill.) and other places may answer the burning question of the moment—the feasibility of an inexpensive method of mass control of dental caries through the communal water supply.

The startling disclosures of the relation of trace amounts of fluorine to the prevalence of dental caries naturally overshadowed the earlier studies in endemic dental fluorosis. Many of these studies have now passed into the history of dental epidemiology; they provided, however, a background from whence evolved many of the methodologies so fruitfully applied in the later studies of dental caries. An outstanding epidemiological feature of endemic dental fluorosis studies is the large number of persons exposed to a determinable constant (a public water supply of known fluoride concentration). This circumstance provided a rare opportunity for studying physiological effects by the epidemiological method¹. With

a precision almost mathematical it was found that each increase in the antecedent cause (fluoride in water) resulted in a commensurate consequent effect (the community index of dental fluorosis).

The more recent epidemiological studies² revealing the wide differences in dental caries experience associated with the use of fluoride (F) domestic waters in the 0.0 to 1.0 part per million range opened up potentialities of mass control of dental caries undreamed of a decade ago. Furthermore, and most important, the amount required to markedly inhibit dental caries attack (1.0 ppm of F.) is sufficiently low to eliminate the complicating problem of endemic dental fluorosis found among users of higher fluoride waters.

The epidemiological studies published in 1938 dealt largely with broad distributional differences in dental caries prevalence among South Dakota and Wisconsin school children of the general population. Another part of this study, e. g. the examinations of 236 nine year old children with a verified continuity of exposure to the public water supply, disclosed a finding of prime epidemiological importance. In an endemic area it was observed that the "limited-immunity-producing-factor" presumably present in the water was operative whether or not the teeth showed macroscopic evidence of mottled enamel. The import of this finding is obvious. Were the tendency to escape dental caries attack dependent upon the individual having mottled enamel *per se* the practical worth of fluorine in dental caries control would be of little or no value. The fact, though, that individuals in these fluoride areas who showed no mottled enamel were equally resistant to dental caries attack aroused the justifiable hope that this natural phenomenon could be converted into a practical means for controlling dental caries *en masse* through the medium of the public water supply.

Presented before the 108th annual meeting of the Illinois State Medical Society, Chicago, May 10-12, 1948

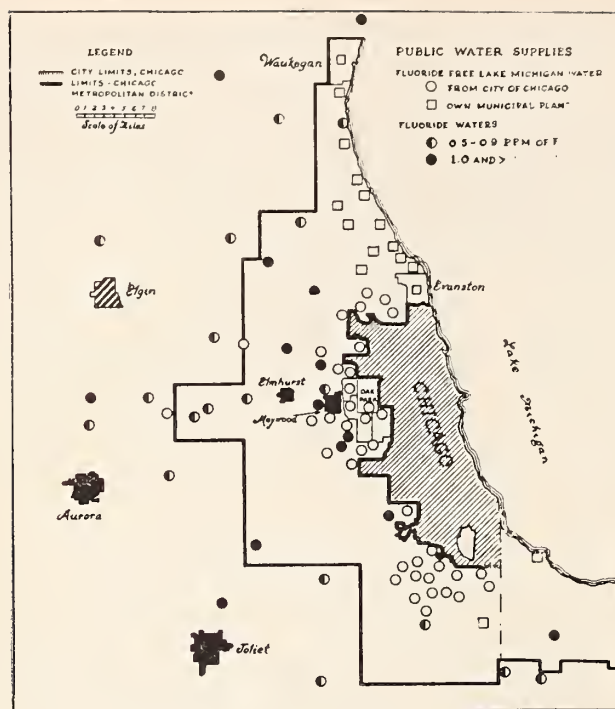


Figure 1.

(From: Dean, H. T.: *Dental Caries and Fluorine*, F. R. Moulton, ed., Amer. Assn. Adv. Sci., Washington, 1946)

To test the fluorine-dental caries hypothesis a detailed study was next made at Galesburg and Quincy (Ill.).² The Galesburg water supply contains 1.8 p.p.m. of fluoride (F): the Quincy water supply obtained from the Mississippi River is practically fluoride-free (0.1 p.p.m. of F.). In planning the study, consideration was given to such variables as age, sex, diet, latitude, sunlight intensity and composition of population. The dental caries experience in the 306 Quincy children was well over three times that observed in the 319 Galesburg children. Bacteriological examination of 186 Galesburg children and 209 Quincy children indicated that the epidemiological aspects of oral *Lactobacillus Acidophilus* in saliva closely reflected the observed difference in caries prevalence rates between the two cities. At Galesburg the public water supply was just sufficiently high to produce endemic dental fluorosis, largely of the mildest type, in about half (47%) of the continuously exposed group. Among those with some evidence of dental fluorosis the dental caries experience was 2.0 permanent teeth per child; among those with no evidence of fluorosis, 1.9 permanent teeth per child. Again it was apparent that the factor responsible for the low amount of dental caries in the city was operative

irrespective of whether the child showed macroscopic evidence of dental fluorosis or not.

An enlarged study of 21 cities providing a wide variety of dissimilar conditions was then undertaken, the study group comprising the following cities: 8 communities of the suburban Chicago area (Elmhurst, Maywood, Aurora, Joliet, Elgin, Evanston, Oak Park, and Waukegan [Ill.]); Kewanee (Ill.); Zanesville, Portsmouth, Middletown, Marion, and Lima (Ohio); Elkhart and Michigan City (Ind.); Colorado Springs and Pueblo (Colo.); and Quincy, Galesburg and East Moline (Ill.). These cities presented a wide diversity in types and sources of water supplies, not only in regard to fluoride concentration, but other mineral constituents as well. The suburban Chicago area constituted an ideal situation for the study of this phenomenon. (Figure 1). Hundreds of thousands of people had unconsciously located in one or the other of the numerous communities, the fluoride (F) content of whose domestic water supply ranged from the fluoride-free Lake Michigan water to concentrations as high as 1.8 p.p.m. of fluoride. (Elmhurst). To students interested in the epidemiological aspects of water and disease, certain basic similarities between the Chicago suburban area and the conditions prevailing in the 1892 cholera outbreak at Hamburg, Altona and Wandsbeck are apparent.

In this study² a total of 7257 white urban school children, age 12 to 14 years, in the 21 cities were examined. All children had been *continuously exposed throughout life to the variable under investigation* (the common water supply). Study of the intensity of dental caries attack, as shown by the dental caries experience of the population, disclosed striking differences. Children using domestic waters containing as little as one part per million of fluoride experienced only about a third as much dental caries as comparable groups using a water that contained no fluoride. Briefly, 847 children continuously using a domestic water containing more than 1.4 p.p.m. of F. averaged 2.4 decayed, missing, or filled teeth per child; 1403 children of cities whose water supplies contained between 1.0 and 1.4 p.p.m. of F. showed 2.9 affected teeth per child. In the 1140 children of cities whose public water supplies contained 0.5 to 0.9 p.p.m. of F. an average of 4.2 teeth per child showed evidence of past or present dental caries attack, while in the 3867

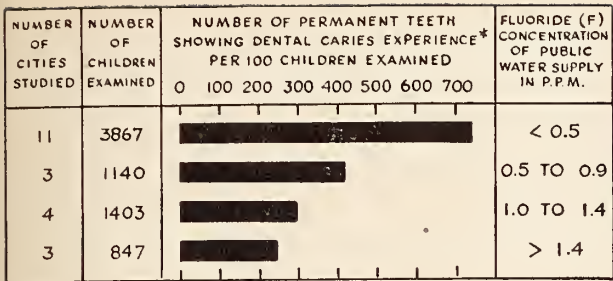


Figure 2.

AMOUNT OF DENTAL CARIES (PERMANENT TEETH) OBSERVED IN 7257 SELECTED 12-14 YEAR OLD WHITE SCHOOL CHILDREN OF 21 CITIES OF 4 STATES CLASSIFIED ACCORDING TO THE FLUORIDE CONCENTRATION OF THE PUBLIC WATER SUPPLY

*Dental caries experience is computed by totaling the number of filled teeth (past dental caries), the number of teeth with untreated dental caries, the number of teeth indicated for extraction, and the number of teeth missing (presumably because of dental caries). From: Dean, H. T., Arnold, F. A., Jr., and Elvove E. Pub.

Health Rep. 57: 1155-1179 (Aug. 7) 1942.

children of cities whose common water supplies contained less than 0.5 p.p.m. of F. an average of 7.4 teeth per child showed evidence of having experienced dental caries. (Figure 2).

Other independent studies in the United States, England, South Africa, Argentine and India report similar findings respecting the influence of small amounts of fluorides on the amount of dental caries in the community².

Bacteriological, chemical, and animal experimentation (rat and hamster) consistently support the epidemiological findings².

The epidemiological characteristics of oral *L. Acidophilus* counts in fluoride and non-fluoride areas have been studied extensively by Jay and Arnold². They report that in communities using fluoride domestic waters containing over 1.0 part per million, the counts in the 0 — 100 range averaged 37.5 per cent of the population compared with 17.8 per cent in the fluoride-free areas. On the other hand counts over 20,000 averaged 28.7 per cent in the fluoride areas as compared with 52.4 per cent in the communities using fluoride-free water supplies. From certain of these studies (Joliet, Elgin and Oak Park) Arnold³ has shown that oral *lactobacillus* counts are apparently related to the intensity of dental caries attack as evidenced by the total caries experience and not to the presence of untreated dental lesions.

Between teeth showing evidence of caries-susceptibility (cariou lesion) and those caries-free,

Armstrong² reported that the enamel of the latter contain about twice as much fluorine as those attacked by dental caries. A more recent study by McClure⁴, however, is not in accord with these findings in so far as it relates to individual teeth. Analyses of enamel of several hundred sound and carious teeth showing no signs of fluorosis and representing nearly 100 individuals, did not reveal differences in the fluorine content.

A recent review by Hodge and Sognmaes² listing a number of experiments involving the use of both the rat and the hamster confirm the inhibitory effects of fluorides in regard to experimental caries. Apparently the most effective method of administration is by food or drink. Iodoacetic acid, another anti-enzymatic agent, inhibits experimentally induced rat caries much the same as fluoride. Analysis of these experiments presents a variety of conditions but specific knowledge of the mechanism by which fluorine inhibits caries still awaits further study. In evaluating the findings from both human and experimental studies, it is well to keep in mind a suggestion made several years ago by McClure⁵ to differentiate between fluorine acquired during formative tooth life (primary fluorine) and fluorine acquired during adult or post eruptive tooth life (secondary fluorine) and the possibility of a third form of tooth fluorine — fluorine acquired by exposed oral enamel surface adsorption (adsorbed secondary enamel fluorine).

A fluorine prophylaxis has been demonstrated by means of a topical application. Present knowledge would indicate that it is essential that the teeth be thoroughly cleaned with pumice (oral prophylaxis) before the first application of the 2 per cent sodium fluoride solution is made. A minimum of 4 treatments which may be given a week apart is essential. In a group under observation for 3 years Knutson⁶ noted a 37 per cent reduction. Bibby⁷ in a group under observation for 2 years about 35 per cent reduction. All studies where a reduction has been observed were made on children. Comparable tests have not been made on adults. Factors in topical fluoride application under investigation include: mechanism of action, most effective fluorine compound, optimum concentration, optimum pH of solution, most satisfactory vehicle, exact number and technique of applications, need for renewal,

effectiveness in adults and other unexplored aspects of this phase of the problem.

The use of topically applied fluorides for the control of dental caries has been looked upon with favor in an editorial in the Journal of the American Dental Association [34:411, (March 15) 1947] but in commenting editorially on the use of synthetic fluoride tablets and bone meal preparations it states [34:345 (March 1) 1947] "Until more convincing data are presented, therefore, the use of fluorides in dentifrices, mouthwashes, tablets and lozenges cannot be recommended."

The presumed hazard of cumulative toxic bone fluorosis seems greatly reduced by the recent studies of McClure² and associates who find a remarkably efficient excretion of fluorine via urine or urine and sweat, apparently a normal body function. He has also studied the bone fracture rate in groups of high school boys and selectees for the Armed Forces and records no unusual differences between those continuously exposed to waters containing as much as 5.0 p.p.m. of F. and those using fluoride-free domestic waters.

At present about ten studies designed to test the practicality of *en masse* control of dental caries through the communal water supply are under way. Within the next ten years it should be known whether it is possible to transfer the benefits of this naturally occurring phenomenon to a public health control measure of wide-spread usefulness. Experimental studies to test the effectiveness of this measure are being conducted at Grand Rapids, Michigan⁸; Newburgh, New York; Midland, Michigan; Brantford, Ontario; Sheboygan, Wisconsin; Evanston, Illinois; Madison, Wisconsin; Ottawa, Kansas; Lewiston, Idaho and Marshall, Texas. In each of these cities the "fluoride-free" domestic water supply is being fluorinated so as to build up the concentration to the level optimal for dental health, one part per million.

In the application of sodium fluoride to the domestic water supply no technical difficulties have been encountered. At Grand Rapids where low fluorination began in January 1945, daily analyses of water samples collected from various parts of the distribution system disclose a consistent uniformity in concentration. The present

cost of fluorination at Grand Rapids is about ten cents per person per year.

Should the high attack rate of dental caries be subject to mass control measures, the influence on dentistry as at present practiced is obvious. If the addition of one part per million of fluoride (F) to a fluoride-free domestic water markedly reduces the amount of dental caries in a community to a level comparable with that observed when this amount of fluorine occurs naturally in a domestic water, the whole problem of dental hygiene and dental practice must be re-evaluated.

As knowledge advances it becomes apparent that the fluoride content of the domestic water is destined to play an important role in dental hygiene. Even at this stage of the development, there seems much justification for classifying domestic water supplies on the basis of dental health into one or the other of three groupings:

1. Those carrying naturally the *optimal* concentration of fluoride (F) i. e. about 1.0 part per million, no treatment being required.
2. Those carrying an *excessive* concentration of fluoride requiring the removal of the excess in order to protect the population against endemic dental fluorosis (mottled enamel), or,
3. Those *deficient* in fluorine to which fluoride might be added to bring its concentration up to the optimal in order to lessen the amount of dental decay in the community.

In a short discussion of this nature it is not possible to touch upon other than a few high points of the problem. For those interested in detailed data on the epidemiological, bacteriological, physiological, biochemical and animal experimentation phases of the problem attention might be called to the monograph of the American Association for the Advancement of Science entitled: "Dental Caries and Fluorine"².

Few observations in Nature disclose the remarkable consistency of the fluorine-dental caries relationship. Both the order of the epidemiological events and the findings of the laboratory point unmistakably to fluorine. On the basis of concomitant variation, the epidemiological evidence in respect to domestic water supplies is particularly impressive; the fluoride variable cannot be changed in quantity without affecting the phenomenon, (dental caries prevalence), fluoride

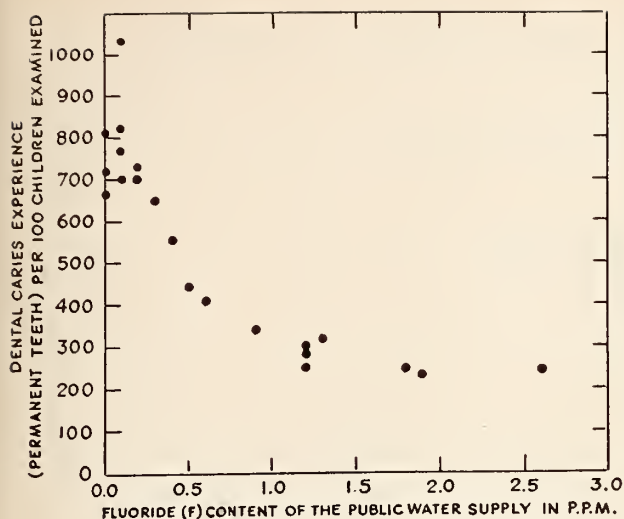


Figure 3.

RELATION BETWEEN THE AMOUNT OF DENTAL CARIES (PERMANENT TEETH) OBSERVED IN 7257 SELECTED 12-14 YEAR OLD WHITE SCHOOL CHILDREN OF 21 CITIES OF 4 STATES AND THE FLUORIDE (F) CONTENT OF PUBLIC WATER SUPPLY

From: Dean, H. T., Arnold, F. A., Jr., and Elvove E. Pub. Health Rep. 57:1155-1179 (Aug. 7) 1942

seemingly constituting an indispensable condition of this particular phenomenon. Figure 3.

From the amount and nature of the epidemiological evidence it would seem unessential that the mode of action of the fluorine be completely known before experimental or demonstration

studies, such as Grand Rapids, be set up. The practical application of Jenner's observation of the protective influence of vaccinia virus in small-pox prevention rested on the purest empirical grounds for a century. For centuries scurvy and malaria were effectively controlled before either the etiology or the mode of action of the prophylactic agent was known. The transference of an observed natural phenomenon into a far reaching public health control measure — as in the examples cited — is not novel in the history of preventive medicine.

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THE GENERAL PRACTITIONER

Before any physician can be a competent specialist, he should be a good doctor and should be well acquainted with all of the diseases of the human body. It, therefore, might be well to urge that the specialty boards require that each applicant have at least three years' experience in general practice before specializing, and that hospitals reserve a major portion of their resident training positions for men with such experiences. The specialty training program then could be lessened, because out of his own experiences the physician would have acquired unusual training

that especially fitted him for any type of medical practice.

The general practitioner is a vital part of our system of medical care. He should not be denied the proper use of available hospital facilities. There are certain intricate procedures that must be limited to specialists in that field, and the competent general practitioner will recognize his limitations. Our present system of medical care is very complicated, and no one can cover the whole field. The specialist and the general practitioner are equally necessary.—Cleon A. Nafe, M.D., *Journal of Indiana State Medical Association*.

The Relation Of Ascorbic Acid To Chronic Arthritis

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Since the recognition of such food adjuncts as vitamins and the various minerals, deficiency in these substances has been mentioned as contributing to the development of arthritis. Every vitamin in the alphabet up to and including K has been indicted as insufficient in chronic arthritis and most of them have been advocated as helpful in the treatment.¹ As an English investigator puts it, "The current frenzy of physicians is to find the right anti-rheumatic vitamin."² Especially has ascorbic acid deficiency been emphasized as a cause of rheumatoid arthritis and also of rheumatic fever. Early work was that of Moore and Jackson.³ They produced infectious arthritis by feeding streptococci to scorbutic guinea pigs. Recent attempts to indict a deficiency of vitamin C as a cause of rheumatic disease have been made; most of these reports have come from California.⁴ In this connection, Rinehart's work has been most widely quoted. He reported degenerative changes in the connective tissue of the heart valves in animals rendered scorbutic. When he produced a localized cellulitis by intracutaneously injecting hemolytic streptococci, proliferation added itself to the valvular degeneration. By the same procedure he produced lesions in the myocardium said to resemble Aschoff nodules. Vitamin C deficiency alone suffices to produce an arthropathy in guinea pigs. Rinehart holds with Klinge that rheumatic fever and rheumatoid arthritis are etiologically and pathologically related.

Discussing Rinehart's paper, Homer Swift⁴ reported finding no significant difference in the metabolism of ascorbic acid in rheumatic and non-rheumatic subjects. He gave 15 rheumatic patients 150 mg. of ascorbic acid daily without improving their condition.

The Boston group at the House of the Good Samaritan did not find any resemblance of the lesions of scurvy to those of rheumatism. Dr. Key was unable to produce rheumatic fever or

rheumatoid arthritis in any laboratory animal with any agent or means.

Abt and his associates⁵ studied the relation of ascorbic acid to children with rheumatic fever. The levels of ascorbic acid were not lower than those of controls. Giving the patient 300 to 600 mg. of ascorbic acid in addition to that of the diet did not affect the course of the rheumatism. Recently a German investigator named Kalk reported benefiting patients with chronic infectious arthritides by giving 50 mg. to 5000 mg. of vitamin C intravenously daily. Hall, Darling and Taylor found low serum ascorbic acid levels in chronic arthritis. Giving these patients 200 mg. of vitamin C daily for eight months restored normal levels but did not benefit the arthritis. Monroe in Oxford Loose Leaf Medicine says, "Vitamins are harmless and may be used if the spiritual support of pills is required." Some of the vitamin concentrates, especially the powerful D products, are not to be adjudged harmless.

The quantitative determination of vitamin C in the serum of patients with arthritis has an added importance since lowered levels of ascorbic acid have been found following the administration of gold, arsphenamine and salicylic acid.

0.4 mg.⁵ to 0.7 mg.⁶ of ascorbic acid per 100 cc. of serum has been regarded as the lower limit of normal.

For this study we took repeated samples of blood from private patients and patients with arthritis in the out-patient department of the Presbyterian Hospital of Chicago. The blood was taken before breakfast and the readings, obtained according to the method of Abt and Farmer, were averaged for each patient. Later these patients were given ascorbic acid (furnished by E. R. Squibb and Sons) orally.

In our series the average ascorbic acid level in the serum was, as might be expected, lower in the charity patients than in those that paid. The

average reading of serum ascorbic acid in the 7 private patients was 1.99 mg.; in the clinic patients, 0.78 mg. per 100 cc. of serum. Two private patients had a serum level of less than 0.75 mg. Only six of the eleven clinic patients had readings of less than 0.75 mg.%. None of the patients presented any of the physical findings of scurvy. In each instance a daily dose of 100 mg. of vitamin C orally was sufficient to raise the serum ascorbic acid level above 1 mg. per cent.

Of the eighteen patients studied, five had hypertrophic arthritis, one had gout, and the rest had atrophic arthritis. The lowest reading 0.1 mg. was made in the gouty patient, an addict of alcohol. The average reading of ascorbic acid in the serum of the patients with hypertrophic arthritis was 1.64 mg., in the patients with atrophic or rheumatoid arthritis was 1.84 mg. The difference reported by Rinehart as existing between hypertrophic and atrophic arthritis regarding vitamin C in the serum was not observed in our patients.

Of the patients with low levels, two with hypertrophic and six with atrophic arthritis were given 100 mg. of ascorbic acid daily by mouth. The ascorbic acid levels were elevated above 1 mg.% and maintained at this elevated level for at least one month without subjective or objective benefit.

A healthy medical student and 17 nonarthritic patients from the clinic were chosen at random. The average level of ascorbic acid in the serum of these individuals without arthritis was 1.23 mg.% as compared with the 0.78% reported for the arthritic clinic patients.

SUMMARY

1. The level of ascorbic acid in the serum of clinic patients with arthritis was low as compared with other patients.

2. No significant difference was noted in the ascorbic acid levels in the two great groups of chronic arthritis, hypertrophic and atrophic (rheumatoid).

3. The serum level of ascorbic acid was higher in seven private patients than in eleven clinic patients.

4. Restoring the serum level of ascorbic acid to 1 mg.% had no appreciable effect upon the chronic arthritis.

CONCLUSIONS

This small series does not permit conclusions regarding the cause or treatment of arthritis, but insofar as they agree with previous work, the results are that:

1. Low ascorbic acid levels in the serum are not characteristic of chronic arthritis.

2. On the principle of good hygiene it is well to restore low levels of serum ascorbic acid to normal, but not with the anticipation that any improvement in the arthritis will result.

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Recent Advances in the Surgical Treatment of Congenital Lesions of the Heart and Great Vessels

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Progress in the field of intrathoracic surgery has been made chiefly during the past three decades. Prior to thirty years ago most therapy in this region consisted of the drainage of inflammatory lesions. Since that time, however, many accomplishments in this field of surgery have been made, the most recent being the development of effective surgical treatment for congenital anomalies of the heart and great vessels. Up until the last decade the diagnosis of congenital lesions in this region was only of academic interest and indeed, frequently no attempt was made to determine the pathological alterations present. With the development of various surgical procedures for alleviating the ill effects of the abnormality, the burden of determining the nature of the defect has fallen upon the cardiologist. The degree of deformity may vary considerably thus adding to the difficulty of its identification. Most lesions, however, produce clinical features which, when combined with the laboratory findings enables the cardiologist to determine the type of congenital lesion present. An accurate diagnosis is especially important in order to avoid needless explorations while in others to offer the patient an opportunity to be benefited by effective therapeutic measures.

PATENT DUCTUS ARTERIOSUS

The ductus arteriosus, which is essential for fetal circulation begins to close after birth with aeration of the lungs. According to Christy¹ approximately 95% are completely closed in twelve weeks and 98.8% at the end of the first year. This lesion was originally described by Galen and has been known as the ductus Botalli since described by Botallus² in 1660. The incidence of patent ductus after the first year is known, however the percentage which give rise

to symptoms is unknown. In an autopsy study of 1000 congenital heart lesions, Abbott³ found 242 cases of patent ductus arteriosus. The incidence of the lesion in this series was second only to that of intracardiac septal defects. The cause of death in this series was cardiac decompensation in 43% and subacute bacterial endoarteritis in 30%, thus indicating the high frequency of infection occurring in this lesion. Cardiac decompensation in these cases is due to the increased work imposed on the heart. A study of the circulation time and cardiac output shows that the heart load may be increased as much as 100% or more. By studying the oxygen content of the systematic arterial blood and again that of the pulmonary arterial blood before and following its closure, the amount of blood going through the shunt from the aorta to the pulmonary artery can be determined. In this way the amount of increased load on the heart may be determined.

The clinical features of persistent patent ductus arteriosus may be more readily recognized after the age of four years. However, when the physical findings are well established, it may be diagnosed at a much earlier age. If no cardiac decompensation develops, it may be entirely asymptomatic throughout the normal span of life. On the other hand, if cardiac decompensation occurs, dyspnea, orthopnea, edema and a rapid pulse are present. If the ductus wall becomes infected, the usual symptoms and findings of subacute bacterial endocarditis are seen. In addition to the above, retardation of growth is frequently evident.

On physical examination a continuous murmur, louder during systole, and a thrill is present over the precordia, being more marked over the second or third left interspace anteriorly. The murmur has been described as being "machinery-like" or "train in a tunnel."

From the Department of Surgery of the University of Chicago.

Read before General Session of Illinois State Medical Society, Chicago, May 12, 1948.

The heart may or may not be enlarged, but even so the electrocardiogram is generally normal. The blood pressure is quite characteristic in these patients. The systolic may be normal or slightly elevated; the diastolic is usually decreased, thus giving rise to high pulse pressure. In some patients capillary pulsation may be present. X-ray and fluoroscopic examinations show an enlargement of the left pulmonary artery and greater movement in this region.

The prognosis of patent ductus arteriosus is unpredictable. Patients have been known to go through the entire life span without difficulties. On the other hand it has been estimated that approximately 25% of the patients with this lesion will die of cardiac failure and that another 30% to 40% will develop subacute bacterial endoarteritis. In a review of 80 fatal cases, Bullock and his associates⁴ found that 14% were dead by the age of 15 years and 50% by the age of 30 years while 71% were dead at 40 years.

Treatment. Surgical closure of patent ductus arteriosus was first suggested by Monroe in 1907⁵, and successful cases were first reported by Gross and Hubbard⁶ in 1939. The first successful ligation of an infected case was reported by Touroff⁷ in 1940. The operative approach is through the second or third left interspace. By retracting the lung downward the ductus is readily located between the phrenic nerve anteriorly and the vagus nerve posteriorly, below the arch of the aorta. After incising the mediastinal pleura the left recurrent laryngeal nerve is followed beneath the aorta, the ductus lying just anteriorly to this nerve. The ductus is carefully dissected free from the pericardium and the left primary bronchus. It usually measures from 5 to 8 mm. in length and from 5 to 10 mm. in diameter.

The operative technique of closing the ductus has varied somewhat during its period of development. Simple ligation without division was the first method used and continues to be employed by many surgeons. Cellophane has been employed to wrap around the ductus following ligation. Transfixion of the ductus at either end has also been successful in obliterating the channel. A method of dividing the vessel between clamps, and closure by suture has been developed by Gross⁸ and at the present time he feels that this procedure is the method of choice in most cases.

By July 1947 he had used this method of closure in 177 cases with but 4 deaths. We have continued to use the method of double ligation of the ductus with heavy braided silk. This has been performed in 20 cases, two of which were infected, with no deaths and no evidence of recurrence. When a surgeon is performing the operation only occasionally, this method is probably attended by less risk than when the ductus is divided between clamps and closed by suture.

Since the report of Gross' first successful case, many of these operations have been performed with gratifying results. If no ill effects have been manifested prior to closure of the ductus, their development will be avoided. In infected cases, closure leads to healing of the process while in cardiac decompensation the individual is returned to normal activity.

TETRALOGY OF FALLOT

Through the carefully planned and brilliantly executed investigation by Blalock and Taussig this congenital malformation has come to be much better understood. It is a lesion that was found in 205 of the 1,000 cases of congenital heart disease reported by Abbott³. The pathological anomaly consists of pulmonary stenosis, dextroposition of the aorta, defect of the interventricular septum and hypertrophy of the right ventricle. The malformation produces an alteration of the normal cardio-respiratory function because of the marked reduction of blood flow to the lungs. In an attempt to compensate for this, there is an accompanying marked increase in hemoglobin and red cell count, as much as 100%. Because of the large amount of reduced hemoglobin, deep cyanosis and clubbing of the fingers and toes develop. These patients exhibit marked dyspnea on exertion and frequently assume a peculiar squatting position which is almost pathognomonic of the lesion. The child is usually underdeveloped and on examination of the thorax, a harsh systolic murmur is heard at the second to the fourth left intercostal space. Approximately one-third of the patients will present a vibrant thrill. Because of the increased load on the right heart, cardiac enlargement is due chiefly to the enlargement of that chamber, and the electrocardiogram shows pronounced right axis deviation. X-rays of the chest reveal a boot-shaped heart with the apex high over the diaphragm and rounded. The pulmonary artery area is somewhat concave and reveals little or no

pulsation. Throughout the lung fields the vessels are less prominent, do not pulsate and the lungs appear unusually clear. Life expectancy in these cases is only about twelve to thirteen years with a maximum of approximately twenty-five or thirty years. Death is usually due to cardiac failure or a cerebral accident.

In an experimental study on animals, Blalock and his associates found it possible to increase the flow of blood to the lungs by anastomosing a systemic artery (subclavian or innominate) to one of the pulmonary arteries. The technique usually employed an end to side union and in essence produced an artificial ductus. After considerable investigation, clinical application was made and in 1945 Blalock and Taussig⁹ reported their first successful cases.

Following the anastomosis, the hemoglobin and red cell count becomes decreased towards a normal level, cyanosis disappears and exercise is much better tolerated. The operation is usually made through an approach in the third interspace on either side. Blalock has chosen to make the approach on the side opposite to that on which the aorta descends. He has found that the aorta descends on the right side in about 20% of these cases. The subclavian artery is preferable to the innominate in that the size is more approximately that desired and complications due to obstruction of the blood flow to the brain are avoided. The risk of the operation has been considerably reduced during the past three years since Blalock's first report. His overall mortality has been approximately 21%. In those cases in which he was able to anastomose the end of the subclavian artery with the pulmonary artery, the mortality was less than 10%.

More recently an operation has been devised by Potts and Smith¹⁰, in which by means of a clamp which constricts only a part of the aorta, a direct anastomosis is made between the aorta and the left pulmonary artery. The relative merits of this operation as compared with the Blalock-Taussig operation has as yet been undetermined. From September 1946 to September 1947 the aortic-pulmonary anastomosis had been performed by Potts and Smith on 45 patients with four deaths or a mortality of 8.8%.

Our experience with this lesion has been with seven patients. In four of these the left subclavian was anastomosed to the left pulmonary artery

after the method of Blalock. One of these expired several months later following a cerebral accident. The other three have been relieved of their disability. The fifth patient expired during exploration due to insufficient blood going to the opposite lung. The sixth was a child having marked cardiac decompensation following a Blalock operation elsewhere. After closure of the artificial communication, the decompensation disappeared. In the seventh, operation was inadvisable.

COARCTATION OF THE AORTA

One of the greatest achievements in this field of surgery has been the resection of a stenosed portion of the aorta and re-establishment of its continuity by suture. Although Carrel¹¹ demonstrated on dogs as early as 1910 the feasibility of this operation, it remained unaccomplished in humans until 1945 when Crafoord¹² and Gross¹³, working independently, reported successful results. Coarctation of the aorta represents about 15% of all congenital lesions of the heart and great vessels. Abbott¹⁴ found in a review of 200 cases that a clinical diagnosis of coarctation had been made in only 14%. Two types of the anomaly have been described; i.e., infantile and adult. In the former type the constriction is diffuse, involving a large portion of the thoracic aorta and is usually incompatible with life. The adult type consists of a narrowing of the aorta at or near the point where the ductus is attached and results in the development of extensive collateral circulation. The degree of narrowing of the aorta is the chief determining factor in the amount of collateral development and the disability produced. The collateral blood flow is through (1) the superior intercostal and first aortic intercostal artery, (2) the internal mammary and the intercostal arteries and (3) the subscapular with the circumflex scapular arteries.

Symptoms usually do not appear in early childhood. Cyanosis and clubbing are not seen since the blood picture remains normal and no shunt between arterial and venous blood is present. Because of the obstruction to the flow of blood beyond the aortic arch, more work is thrown on the heart. In an effort to maintain sufficient pressure below the point of obstruction, hypertension above the point of narrowing develops. This leads to left ventricular hypertrophy.

The diagnosis is usually not difficult and is made on the following observations: (1) a

hypertension in the upper extremities with decreased or absent pressure and pulse, and lowered temperature in the lower extremities, (2) a decreased tolerance to exercise and (3) x-ray evidence of erosion of the ribs, absence of the aortic knob, and usually cardiac enlargement.

In untreated cases, this lesion causes death due to the effects of the coarctation in approximately 25% of the cases. This occurs usually between the age of 25 and 40 years. The main causes of death are (1) decompensation and aortic insufficiency in 30%, (2) rupture of the aorta in 25% and (3) cerebral hemorrhage, sudden asystole, subacute bacterial endoarteritis and rupture of an aneurysm in the remainder.

The successful surgical management of this lesion has been a direct result of animal experimentation since 1938 by Gross and Hufnagel¹⁵ and Blalock and Park¹⁶ in America and Crafoord¹² in Sweden. Although the technical details of the operations devised by these workers have varied somewhat, the principle underlying the surgical management has been the same, namely to increase the flow of blood beyond the point of aortic constriction.

The operative approach is made through the region of the 4th left rib. When the constriction of the aorta is located just beyond the origin of the left subclavian artery, technical difficulties may preclude anastomosis of the two ends following excision of the narrowed portion. In such cases, since the left subclavian is usually enlarged, Clagett¹⁷ has used this vessel to bridge the obstruction after its ligation and division at the apex of the chest. In either case sufficient mobilization of the aorta and division of the first two or three pairs of intercostal vessels is necessary for making the anastomosis.

The operation is usually well tolerated unless cardiac decompensation is advanced. By early 1947 Crafoord had corrected this defect in 15 patients with two deaths. Gross had performed the operation 22 cases with two deaths at a somewhat later period. Our experience has been limited to one patient. This was a boy of seven years whose main complaint was decreased tolerance to exercise. He was normally developed and nourished. The blood pressure was 170/90 in the arms but neither the pulse nor blood pressure could be determined in his lower extremities. The heart was somewhat enlarged and some ribs showed notching. At operation the

narrowed portion of the aorta extended from the base of the left subclavian distalward for two centimeters. This was ligated near the subclavian and after excising that part beyond the ligature, the subclavian was united to the aorta by suture. The part of the aorta removed showed complete occlusion of its lumen. This patient has continued to do well since operation.

Other congenital lesions which have been relieved by surgical intervention include double aortic arch, abnormal subclavian and other vessels¹⁸. In this group of lesions, symptoms are usually produced due to constriction of the esophagus, trachea or bronchus between the anomalous and normal arteries. Complete relief of symptoms may be expected following correction of the defect.

Through the employment of improved methods of diagnosis including angiocardiology, catheterization of the heart and vessels and ballistocardiography more will be learned about other anomalies for which as yet there is no effective surgical treatment. With continued effort and investigation, it is not too much to expect further progress in this field.

SUMMARY

Effective surgical therapy for congenital lesions of the heart and great vessels has been the most recent development in thoracic surgery. This progress has been due chiefly to the clinical application of principles established through animal experimentation. Patients with a Patent Ductus Arteriosus, Tetralogy of Fallot or Coarctation of the Aorta may now have these lesions corrected and look forward to a more nearly normal life expectancy. With continued cooperative investigation, further development in this field may be expected.

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The Frequency of Urination in Women

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It has been difficult for us to appreciate that the female urethra may harbor many lesions which can cause constant or intermittent urinary symptoms in women. In recent years we have become more urethral minded and are focusing more attention upon this 4.5 cm. of urinary tubing. More articles are being written on the subject and improved water-irrigating for oblique urethroscopes have made the recognition of urethral lesions much more accurate and their management much more simple.

There has been considerable controversy regarding the embryo-histological origin of some structures found in the deep urethra. Caulk, Renner and Folsom have stated that periurethral glands are normal findings in the female urethra. MacKenzie and Beck, however, have interpreted these findings as inflammatory epithelial inclusions. They concluded that the female prostate does not exist, but that perimucosal structures about the bladder neck and deep urethra are acquired. They cite as stimuli for

the acquisition of these structures: 1. — Infections of the urinary tract. 2. — Structural anomalies within the urinary tract. 3. — Trauma of childbirth.

Renner in a gross study of the urethra, bladder neck and trigone described the presence of hard, black, nodule-like excrescences which he considered as corresponding to concretions found in the male bladder and sticking into the excretory ducts of the prostate. He also described the presence of complex gland structures under the trigonal portion of the female urethra, resembling the prostate gland. He concluded that "the female urethra resembles the male urethra, especially in its relationship with accessory glands, genital apparatus and Cowper's glandular bulbo-urethrales."

Nesbit in 1933 described the formation of periurethral abscesses from glandular foci in the proximal female urethra, and stated that another sequela of chronic urethritis in the female is contracture of vesical neck, comparable to the same condition in the male and amenable to transurethral resection.

In recent years many excellent articles have been published on the importance of the female urethra and its relation to urinary symptoms, pyelonephritis, cervicitis and pelvic infections.

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In an extensive article, Zelicovici discusses cystalgia and pain referred to the upper and lower lumbar regions and to the external genitalia. This syndrome occurred frequently in women from 45 to 60 years of age in whom there is often nothing diagnostic in the urine. He enumerates and briefly discusses various causes of such symptoms and concludes that in most of these cases urethral lesions are the etiological factor in the production of the symptoms. Hanley recently wrote a convincing article on the relation of pyelonephritis secondary to urethritis in the female. He showed that most of the urethral lesions produced symptoms and were rarely found in women with an absolutely negative urinary history. Henrickson, Hall, Ormond, Folsom, and many others have reviewed their experiences and treatment results in urethritis. The most accepted treatment at the present time is periodic urethral dilatation and silver nitrate instillations. Spence in 1940 suggested urethral dilatation and weak electrocoagulation of the diseased urethral mucosa. He reported 77% satisfactory results.

Our records of 776 female urological patients revealed 336 cases (43.3%) with one or more urethral lesions. Of these 336 cases, 312 were treated. This paper reflects the summary of these treated cases and the results that were obtained.

The age of our patients ranged from 10 to 94 years. The majority (50%) were between 30 and 50 years of age. One hundred and ninety-one (57%) were married, 76 were single and 69 were either widowed or divorced. Three hundred and seventeen patients were white and 19 were colored.

The duration of symptoms varied from one month to 25 years. In 21% they had been present for more than five years. The symptoms are frequently intermittent but may be continuous. With a persistent trigonitis the symptoms are usually also persistent. The symptoms quadrate are frequency, urgency, burning, and nocturia. Hematuria and a history of hematuria were noted in 59 patients (17.6%). Eighty-one women (24%) complained of marked nervousness. The most common pains were backache (30%) and suprapubic discomfort (25%). Some of the patients described a subsymphyseal midline pain which can be pathognomonic of chronic urethritis. One-hundred and one patients (30%)

complained of urinary incontinence: (48 urgency; 25 stress and strain; 14 stress and strain and urgency; 6 enuresis.)

Physical Findings: — These patients should have a careful examination including a pelvic examination and excretory pyelograms. The physical examination may be entirely negative except the urethra. In 67% of our cases the abdominal examination was negative. Lower abdominal tenderness was present in 14 per cent, tenderness in the right upper quadrant 10 per cent, tenderness in the left upper quadrant 4 per cent and generalized tenderness 2%. The right kidney was palpable in 26 instances, the left in 8. Hypertension was present in 22%, obesity in 12% and arthritis in 18%.

Urethral And Bladder Palpation: — The urethra in 252 patients (75%) was thickened or prominent. Palpation of the proximal urethra and trigone reveal tenderness and a strong desire to void. When infected, palpation of Skene's ducts against the symphysis shows thickening and marked tenderness. In some cases inflammatory products can be expressed from these ducts. Palpation of the lower ureters may reveal moderate to severe tenderness. Some interpret these findings as ureteral strictures. With negative ureterograms, this tenderness is more apt to be periureteritis and lymphangitis extension from the urethra and trigone. These ureteral findings can disappear after urethral and trigonal treatments. Should they disappear after ureteral dilatation, it is probably the result of the incidental urethral dilatation with the cystoscope.

Gynecological Findings: — No gynecological abnormalities were found in 102 patients (30%). Cystocele, rectocele and urethrocele were present in 39% and cervicitis in 17%. In order of their frequency pelvic infections, ovarian cysts, senile vaginitis, bartholinitis, fibroids, retroversion uteri, leukoplakia vulvae, urethro-vaginal fistulae and vesicovaginal fistula were found in percentages ranging from 7.4% to 0.3%. One hundred and thirty-eight patients (41%) had been pregnant, sixty-five (19%) had miscarriages and 28 (8.5%) had had a previous hysterectomy.

From the above it can be seen that many of these cases will overlap and involve the field of urology and gynecology. On the whole these cases can be divided into three distinct groups.

Group I: Here the urinary tract is entirely responsible for the pelvic symptoms usually due to acute or chronic urinary infections. Group II: Here the gynecological lesions are entirely responsible for the pelvic symptoms such as cystoceles, urethroceles, rectoceles, cervicitis, pelvic infections, tumors, cysts and so forth. A correction of these gynecological lesions will usually alleviate all the symptoms including the urinary, if present; Group III: In this group both gynecological and urological lesions are present. This group of cases requires both gynecological and urological services for satisfactory treatment and results. Unless the patients in this group are treated in this manner, only a partial relief of symptoms will be obtained. It can usually be determined which lesions are causing the major symptoms. The lesions causing the major symptoms naturally should be corrected first. There are many gynecologists and urologists who do not appreciate the existence of this 3rd group of patients.

Urine: — Most of our patients showed a grossly clear urine. The sediment of 238 (71%) bladder specimens contained only an occasional pus cell. Varying amounts of pus cells were found in 89 specimens and only 9 (3%) showed a grade iv pyuria. Three-hundred and eight (92%) showed only an occasional red blood cell, ten showed 100 or more red cells p.h.f. One hundred and forty-nine (79%) of the 188 catheterized kidney specimens showed no pus, 38 a few to a moderate number and 1 a four plus pyuria due to tuberculosis.

Three hundred and thirty-four patients had a culture of the bladder urine of which 75 (23%) were sterile. Positive cultures were obtained in 259 specimens of which 41 (16%) showed a mixed infection. The most frequent bacterial offenders were: staphylococci 105, B coli 90, streptococci 30, alkaligenes 19, aerogenes 28, miscellaneous 28. Ninety-four (50%) of the kidney specimen cultures were sterile. In the remaining 94 specimens the staphylococcus and colon bacillus were predominant. The bacterial growth in 15 renal specimens was meagre, probably contamination.

Renal Pathology: — Renal lesions are outside of the scope of this paper. They should always be kept in mind when evaluating frequency of urination in women. Seventy-five patients had an excretory and sixty-eight had retrograde

pyelograms. Sixty (80%) of the excretory examinations were normal and 49 (72%) of the retrograde studies were negative. Pyelonephritis, calculi, hydronephroses, anomalies, strictures, and nephroptoses were the predominating kidney lesions. One patient had a unilateral renal tuberculosis and another a renal neoplasm. When found, correction and treatment of renal lesions should be obviously included in the treatment program.

Cystoscopy And Urethroscopy: — All the patients were examined with a routine cystoscope and a water irrigating urethroscope. A urethral narrowing below a 24F was considered a stricture, including the small meati. Bladder lesions were noted in 175 patients of which 66 (20%) were membranous trigonitis. Other lesions recorded were: Subacute and chronic cystitis 45, interstitial cystitis 7, submucous muscular hypertrophy 23, contracture of the vesical neck 24 and miscellaneous 10 (diverticulum 1, angioma 2, carcinoma 2, leukoplakia 1, calculi 1, cordbladder 3.)

The urethroscopic findings showed a predominating deep granular urethritis in 150 cases, granular urethritis with cyst formation in 129 and severe atrophic urethritis in 1. Polypoid masses and granular urethritis were seen in 50 cases and advanced urethral sclerosis in 6. The distal urethra showed a very interesting group of lesions in 258 patients or 76.5%. The following pathology was seen: Infected pockets and skeneitis 118 (35%), papilloma of the meatus 49 (15%), small meati 38 (11%), caruncle 28 (8%) and urethral stricture 25 (7%).

Urethral Treatment: — Three hundred and twelve urethras were treated with weak electrocoagulation of the entire proximal urethral mucosa and bladder neck. The distal trigone was similarly treated when a whitish membrane was present. In 136 patients electrocoagulation through a 28F McCarthy panendoscope was the only treatment given. In 176 the electrocoagulation treatment was followed by urethral dilatations. These treatments were done under caudal, gas, local and intravenous anaesthesia. All small external meati were treated by meatotomy. Skene's ducts were catheterized with a blunt probe and incised into the lumen of the urethra with the cutting current. Aberrant distal urethral pockets were similarly treated.

Papilloma of the meatus are removed by electrocoagulation. An attempt was made to remove the caruncle for microscopic section and to coagulate the entire base of the caruncles to avoid recurrences. All electro-surgery of the distal female urethra can be greatly facilitated by using a special illuminated urethral speculum.

Post-Electrocoagulation Treatment: — Hospitalization of three to seven days is necessary for a complete examination and treatment. Not all of our patients were hospitalized. Indwelling catheters were used for 48 hours in patients where post-treatment difficulty in voiding was anticipated. There is more soreness, discomfort and bloody discharge from treating the lesions in the distal urethra. After 24 or 48 hours patients are given hot sitz baths and external douches. Antibiotics and chemotherapy are used when the urine cultures are positive. The treated areas are completely healed after three to six weeks. Postoperative sounds are begun only after the urethra is healed and residual symptoms warrant further treatment. Periodic dilatation every ten days is repeated until the urethra has been fully dilated. During the menopause patients are given adequate dosages of estrogen. In addition associated pelvic, abdominal and renal lesions were scrutinized and corrected. In a few instances the correction of remote foci of infection was recommended.

Results Of Treatment: — The immediate results were gratifying, including 37 (12%) patients whose symptoms warranted re-examination and retreatment for residual urethral lesions. The 136 patients treated by electro-coagulation showed that 91 (67%) became asymptomatic and 30 (22%) markedly improved. In ten there was no improvement and in five the results were unknown. It was necessary to dilate the urethras of 176 patients after electrocoagulation to obtain maximum improvement; 99 (56%) then became asymptomatic and 52 (30%) showed marked improvement. Twenty-five obtained little or no benefit following treatment. In other words, in the electrocoagulation group 121 (88%) became asymptomatic or were markedly improved. In the electrocoagulation and dilatation group 151 (86%) became asymptomatic or were markedly improved. In 40 (13%) there was no improvement or the results were unknown.

The above satisfactory results were marred

by 70 (22.5%) patients who had recurrent mild to severe symptoms from one to eight months after the treatments were concluded. Re-examination showed sufficient urinary and genital lesions in 52 patients to account for the recurrent symptoms. They were: residual urethral granulations, cysts and skeneitis 10, bacilluria 8, contracture of vesical neck 7, cystourethrocele 6, trichomonas vaginitis 5, interstitial cystitis 4, acute urethrocystitis 3, cervicitis 3, pelvic tumors 2, renal and ureteral lesions 4. In 18 patients no local cause for the recurrences could be found. Psychoneurosis, sexual incompatibilities, masturbation, allergy or drugs seemed to be contributing etiological factors.

Follow-Up: — One hundred and thirteen patients (33.6%) were followed from one to six months; 33 (14%) for one year; 32 (13%) for two years; and 127 patients (40.7%) from two to five years. The follow-up in 31 (12%) patients was unavailable.

SUMMARY

From our studies it would seem that chronic granular urethritis with cysts or polyps is the most common cause of frequency in women. Anatomically the female urethra is exposed to repeated infections and trauma. Urinary and genital infections are most frequently responsible for the activation of these chronic lesions. Their origin may occur during infancy and childhood. The characteristic syndrome is frequency, urgency, burning and nocturia. The symptoms are continuous or intermittent. Abdominal and pelvic pain and low backache are frequent complaints. Flank and upper quadrant pains may be associated with the frequency. Exacerbation of the bladder symptoms following intercourse are pathognomic of chronic urethritis. Many of these women have become exceedingly nervous due to persistent vesical symptoms and pain. Most of these patients have had previous treatments which cleared all the symptoms but recurrences usually have followed after a brief or extended interval. Silver nitrate installations and urethral sounds may produce marked improvement but in advanced cases relapses are common.

The examinations, including the kidneys and upper ureters are frequently negative. The entire urethra and Skene's ducts are prominent and tender. The tenderness along the lower

(Continued on page 50)

CASE REPORTS



Fatal Menorrhagia in Thrombocytohenic Purpura

Report of Two Cases and Brief Review of the Literature

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In the management of severe menorrhagia the gynecologist must exclude pathology of uterus and adnexa, pregnancy and blood dyscrasias.

Idiopathic thrombocytopenic purpura is defined by Cecil¹ as a disease that may be acute or chronic and is characterized by a marked and unaccountable diminution in the number of blood platelets, spontaneous hemorrhage from mucous membranes and purpura, more often afflicting young females. Postmortem examination may reveal no characteristic lesion. Meaken² describes the disease as characterized by repeated crops of purpura which may vary in size from

pin point to large areas the latter frequently due to trauma. The principal characteristics are found in the blood; parallel with the reduction of the platelets, there is delayed bleeding time and decreased contractility of the blood clot, but a normal clotting time and capillary fragility.

A review of the literature shows an abundance of material on essential thrombocytopenic purpura but little on that not altogether rare manifestation where uterine hemorrhage is the prime symptom, more frequently reported from the various European clinics.

Menorrhagia may be the only symptom of essential thrombocytopenic purpura. Gouldburgh and Gouley³ concluded that a platelet count and bleeding time should be determined in every case of menorrhagia in adolescent girls.

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**Presented before the Chicago Gynecological Society,
October 15, 1948.**

Israel and Mendel⁴ further substantiate this finding, reporting "severe menorrhagia as the only symptom of essential thrombocytopenic purpura cured by splenectomy", adding that the presence of organic uterine lesions can be eliminated by curettage; and the absence from bone marrow of megakaryocytes (the progenitors of circulating platelets) is indicative of faulty platelet formation and also bespeaks the futility of splenectomy, whereas the presence of megakaryocytes suggests the dyscrasia as caused by the probable elaboration of a platelet-destroying substance "thrombocytopen" by the spleen, the removal of which may prove eminently beneficial.

L. Snaith⁵ also reports a case in which menorrhagia was the only significant symptom and discusses two other similar cases with menorrhagia the single symptom of latent purpura. Snaith suggests that vitamin P might prove beneficial.

E. C. Smith⁶ reports in detail two out of five cases where purpuric rashes on the lower extremities were coincident with menses. This may or may not be associated with a subnormal lowering of the physiological reduction of the platelet count found prior to the onset of menses.

Case 1.—Mrs. J. C., a white nullipara aged 18, was admitted to the hospital on November 13, 1947, with a diagnosis of severe anemia due to menorrhagia. Her symptoms were recurrent bilateral shoulder pain of one month's duration, right lumbosacral pain for one month, irregular vaginal bleeding for the past sixteen weeks and one episode of fainting at the stool. The admission temperature was 100.2°, pulse 108, respiration 20, blood pressure 120/70. The chest and heart were essentially normal.

On pelvic examination the uterus was normal in size and shape; the adnexa could not be identified; the culdesac was filled with a non-tender fluctuant mass about the size of an orange.

Transfusions were started immediately in an effort to prepare the patient for surgery as an ectopic pregnancy, but she developed a transfusion reaction with jaundice. Laparotomy was deferred, and her condition grew worse daily. Repeated platelet counts averaged 76,000. Nineteen days after admission the patient expired.

The postmortem anatomic diagnosis was primary thrombocytopenic purpura (Werthof's diseases).

The uterine cavity contained a loosely adherent semiformal red blood clot that extended into and occupied the entire length of the right salpinx. Large polycystic ovaries, each measuring 7x5x3 cms., had prolapsed into the culdesac producing the mass felt on pelvic examination.

Case 2.—Miss I. M., white, unmarried, aged 18, gave a history of vaginal bleeding for twenty-four days. Her past history was negative except for easy bruising especially on her legs for the past 7 days. Physical examination was essentially negative except for the severe anemia and moderately tender adnexa.

On admission temperature was 101°, pulse 116, respiration 28, blood pressure 110/70, red cells count 2,300,000, leukocytes 13,000, and hemoglobin 30 percent.

A transfusion of 500 cc. was given and on her second hospital day a curettage was done. The findings were of no significance. A platelet count showed 20,000 to 40,000; the coagulation time was normal; the bleeding time was slightly increased. Bone marrow slides made by Dr. Limarzi revealed the absence of megakaryocytes, leukemic cells and cells foreign to bone marrow. He concluded that this case could not be classified as a typical thrombocytopenic purpura of the primary type and suggested that some secondary factor be sought to account for the thrombocytopenia.

On the fourteenth hospital day the patient developed a generalized purpuric rash that included the buccal mucous membrane. A fundoscopic examination revealed a large hemorrhagic area on the retina. On the twenty-third hospital day the patient developed clinical findings of a pyelitis. She expired on the fortieth hospital day. The anatomic diagnosis on postmortem examination was: Secondary thrombocytopenic purpura; septicopyemia with miliary abscesses in the kidney; serous pericarditis; cloudy swelling of the myocardium; bilateral fibrocystic disease of the ovaries; hemorrhagic cystitis cystica.

CONCLUSIONS

All cases of menorrhagia, especially in the younger age groups, must *not* be considered as limited to pregnancy complications, endocrine disturbances and uterine pathology. Platelet counts in these conditions should be as routine as red and white cell counts.

Menorrhagia associated with blood dyscrasias are not as rare as might be suspected and is to be included in the differential diagnosis of menorrhagia.

The choice of therapy is determined by hematological and laboratory findings. The use of vitamin P is worthy of consideration. Splenectomy is indicated if megakaryocytes are present.

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Frequency of Urination in Women (Continued)

ureters is more apt to be lymphangitis extension from the floor of the bladder and urethra. A routine careful gynecological check is essential. Two out of every three women have pelvic pathology. Routine precystoscopic excretory pyelograms should be made. Examination of the entire urethra with adequate instruments will localize and visualize all the lesions. Electrocoagulation destruction of the lesions with a weak bipolar current is unusually simple, accurate and effective. Intravenous sodium pentothal is an ideal anaesthetic when treating these cases and we now use it routinely unless contraindicated. Complete destruction of the chronically infected periurethral glands accounts for the fewer recurrences. Re-examination of these urethras treated by electrocoagulation after one to ten years has shown routinely a healthy slightly-pale pliable mucosa. Following urethral treatments women are still subjected to recurrences due to trichomoniasis and attacks of acute urethrocystitis so common in the female.

The disadvantages of urethral electrocoagulation treatment is that hospitalization from three to seven days is necessary. The treated urethras

do not heal for four to six weeks. During this time intermittent bladder symptoms and mild urethral bleeding occurs. This postoperative morbidity may be shortened by chemotherapy and antibiotics. We have encountered three cases of post-treatment of urinary incontinence which were cured by urethral dilatation. Following incision of Skene's ducts one mild stricture occurred which also responded to dilatation. Postoperative sounds are necessary in 56 per cent of the patients to obtain the maximum relief of the annoying urinary symptoms.

CONCLUSIONS

1. Urethral lesions may be found in 43% of female urologic patients. When present, they usually cause symptoms.
2. Frequency of urination in women with a clear urine suggests a urethral focus.
3. The entire urethra should be examined and treated for the maximum relief of symptoms.
4. Mild electrocoagulation of the diseased urethral mucosa has given us the most permanent results. 56% of the treated patients needed postoperative dilatation.
5. Children with persistent pyuria and normal pyelograms should be cysto-urethroscopied.

PATHOLOGY CONFERENCES

EDWIN F. HIRSCH, DEPARTMENT EDITOR



Presentation of Three Cases

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Diffusely Infiltrative Carcinoma of the Neck of the Urinary Bladder

A white male accountant aged 61 years entered St. Luke's Hospital for the second time on September 28, 1948 and died on October 21, 1948. He had entered the hospital the first time a month previously because of pain in the right side of the neck and shoulders for six weeks. Eight months before, he had consulted a genito-urinary specialist because of dysuria, polyuria, and nocturia, and had been under his care since then. An attack of hematuria had occurred about a month before admission. He had lost about 10 pounds in weight. His blood pressure was 190/120 mms. Hg.; pulse, temperature and respirations were normal. The prostate was large, nodular and hard. The urine contained erythrocytes and leucocytes; the blood had 3,150,

000 erythrocytes and 10,300 leucocytes per cmm., and 8.7 grams percent hemoglobin. The percentages of the leucocytes were: lymphocytes 13, monocytes 3, neutrophil polynuclear 74, eosinophil polynuclear 5, and band cells 5. The blood had non-protein nitrogen 40 mgms, urea nitrogen 24.4 mgms, sugar 84 mgms and cholesterol 208 mgms percent. The alkaline phosphatase was 8.0 Bodanski units (normal 2-4) and acid phosphatase 1 unit (normal 1-2). A roentgenogram disclosed a diffuse osteoporosis and radiolucency of the lateral portion of the fifth cervical vertebra and of the right fifth and sixth ribs.

He received stilbesterol, roentgen ray therapy and symptomatic treatment for abdominal dis-



Figure 1. Photograph illustrating the infiltrative carcinoma of the neck of the urinary bladder, the compression of the vesicle portion of the ureters, the hydroureters and the invasion of the prostate by carcinoma tissues.

comfort. After 25 days in the hospital he was discharged on September 14, 1948 but returned two weeks later because of urinary frequency, constipation, motor-ataxia and mental confusion. A hard fixed mass in the sternum at the level of the third rib was 3.5 cms. in dia. and was elevated 1 cm. The lungs had many rales at the base, the heart was enlarged to the left, the blood pressure was 155/90 Hg., the pulse 88 per minute and regular. The liver extended 3 cms. below the costal margin. The prostate seemed larger than during the first admission. The non-protein nitrogen of the blood was 86 mgms, the urea nitrogen 74 mgms, and the creatinine 4.1 mgms percent. The blood had 2,550,000 erythrocytes and 14,500 leucocytes per cmm. and 7.1 gms. percent hemoglobin. His bladder was catheterized frequently. He became restless, disoriented, incontinent and died on the 24th day of his second hospital admission.

The essentials of the anatomic diagnosis of the necropsy are:

- Primary carcinoma of the neck of the urinary bladder;
- Carcinoma invasion of the prostate and seminal vesicles;
- Metastatic carcinoma of the sternum, subcutaneous fat and fibrous tissues, liver, ribs, vertebrae, lungs, right suprarenal gland, large bowel, and of the

iliac, pelvic, periaortic abdominal, biliary, mesenteric, left axillary and anterior mediastinal lymph nodes;

Carcinoma compression of the vesicle portion of the ureters, the azygos and right common iliac veins; Hydroureter and hydronephrosis and chronic pyelonephritis of the kidneys.

Opposite the manubrium of the sternum was a nodule 4.5 cms. in dia. and elevated 1.5 cms. which contained hemorrhagic tumor tissues. The right leg was markedly edematous. The subcutaneous fat tissues of the trunk also had hemorrhagic nodules of tumor tissues 1 to 8 mms. dia. The left axillary lymph nodes contained hemorrhagic metastases.

The lining of the urinary bladder was trabeculated. The neck of the urinary bladder had an ulcerated infiltrative tumor 6.5 by 5 cms. The prostate beneath, extensively invaded by tumor tissues, was 7 by 10 by 8 cms. (Figure 1). Each ureter opened into the margin of the ulcerated tumor tissues in the bladder. The openings admitted only the passage of a probe 1 mm. in dia. The lining of the intramural portion of the right ureter was granular, that of the left was smooth. Both seminal vesicles were embedded in tumor tissues. The periaortic ab-

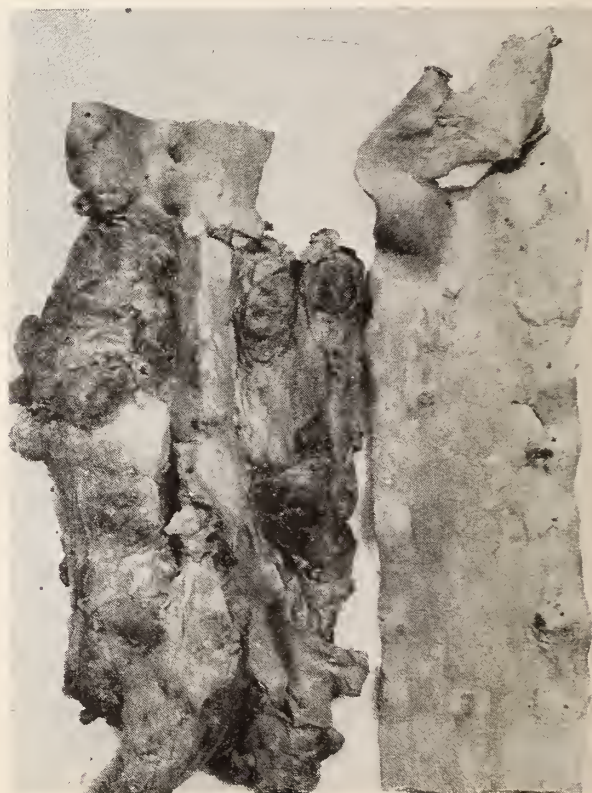


Figure 2. Photograph illustrating the hemorrhagic carcinoma metastases of the periaortic lymph nodes.



Figure 3. Photograph illustrating the carcinoma of the urinary bladder, the bilateral hydroureter, the dilated renal pelves, and pyelonephritis.

dominal lymph nodes were markedly enlarged by hemorrhagic grey tumor tissues (Figure 2); also the parabronchial, the mesenteric and the iliac lymph nodes. Other metastases were in many of the right and left ribs, the right suprarenal gland, the liver, the lungs and peritoneum. Tumor tissues compressed the right common

iliac vein. The right kidney weighed 120 gms., had a chronic pyonephritis and moderate dilatation of the pelvis and calyces. The right ureter was markedly dilated above the urinary bladder level. The left kidney weighed 150 gms. This kidney had changes like those of the right, and the left ureter also was dilated above the urinary bladder (Figure 3). The liver weighed 2730 gms. and had many grey nodules of tumor tissue 1 mm. to 5 cms. dia., the larger nodules hemorrhagic and necrotic. Histologic studies demonstrated that the carcinoma consisted of masses of small anaplastic cells, arranged in papillary stalks. This papillary structure has significance in that it bespeaks for the tumor, an origin in bladder mucosa, this being the common form of epithelial growth in the urinary tract. Consideration, of course, was given to the possibility of the tumor arising in the prostate or seminal vesicles; the latter not probable, the other excluded largely in the basis of cell structure and tissue arrangement.

COMMENT

Almost all carcinomas of the renal pelvis, ureter and urinary bladder have a papillary structure. Often the growth is into the lumen and that again is regarded as characteristic. However, some carcinomas of the urinary bladder grow diffusely into the wall without producing an appreciable protruding mass. These are the diffusely infiltrative growths, and they too reveal somewhere their parent origin by forming papillary stalks.

Bilateral Carcinoma of the Mammary Gland and Subsequent Reticulum Lymphosarcoma

A white housewife aged 48 years entered St. Luke's Hospital because of fatigue, weakness, nausea, vomiting and a loss of 12 pounds within three months. For two weeks she had pain in the legs and the right was slightly larger than the left. A colloid goiter had been removed surgically at the age of 21 years. At the age of 41 years a left radical mastectomy had been done for carcinoma and the axillary lymph nodes

removed had metastases. Four series of roentgen ray treatments, together 19,100 roentgen units, were given during the next seventeen months. Four years later a radical right mastectomy was performed for carcinoma but the axillary lymph nodes were not involved. During a single course of roentgen therapy, 4,640 roentgen units were given. Fourteen months before admission an enlarged right cervical lymph node

was removed for diagnosis. This was reported as having a reticulum cell lymphosarcoma. With roentgen ray therapy, enlarged lymph nodes in the groin and cervical regions reduced greatly in size. When admitted to St. Luke's Hospital she appeared chronically ill. Large tender lymph nodes were palpated in the right groin and the right leg was swollen. The blood had 2,870,000 erythrocytes and 8,250 leucocytes per cmm. and 8 gms. percent hemoglobin. The differential count was 7 percent lymphocytes, 5 monocytes, 66 neutrophil polynuclear leucocytes, 6 eosinophil polynuclear leucocytes and 14 band forms. Roentgen films of the bones disclosed nothing unusual.

The patient grew worse, her admission complaints remained. She received further roentgen ray therapy, her temperature ranged between 98.2° and 100°F. and she died on the 90th day in the hospital. The blood remained about the same as when she was admitted.

The essentials of the anatomical diagnosis of the necropsy are:

Reticulum lymphosarcoma of the periaortic abdominal, inguinal, mesenteric, perirenal and cervical lymph nodes and of the spleen;

Metastatic lymphosarcoma of the peritoneum, the small and large bowel, the appendix vermiformis, the parietal pleura, the psoas muscles, the skin and muscles of the right thigh, the right kidney, the uterus, and of the left fallopian tube, ovary and broad ligament;

Lymphosarcoma constriction of the inferior vena cava, right and left common iliac veins and right femoral vein;

Bilateral mamnectomy scars of the chest (carcinoma of the left mammary gland with extensive metastatic carcinoma of the left axillary lymph nodes; carcinoma and fibroadenoma of the right mammary gland).

The body of this woman weighed 120 pounds and had old bilateral mamnectomy scars of the thorax and a linear biopsy scar on the right side of the neck 3 cms. long. Moderately enlarged lymph nodes were palpated on the right side of the neck and in the left groin. The right thigh was markedly edematous. Both pleural spaces had small amounts of clear yellow fluid, a few small adhesions between the lungs and the pari-

etal pleura, but no tumor nodules except on the right side near the spine just above the diaphragm where there were masses of tumor tissue 3 cms. in dia. and 1 cm. thick. These were in close relation with markedly enlarged periaortic abdominal lymph nodes which formed a mass 10 by 15 by 5 cms. that extended into the psoas muscles. The parabronchial lymph nodes also were enlarged. The lumen of the lower portion of the inferior cava was encroached upon by the tumor tissues and reduced to a slit 1 by 0.2 cm. The iliac and groin lymph nodes on both sides were markedly enlarged, surrounded the common iliac veins and constricted the lumen to less than 5 mms. dia. The right femoral vein was compressed for 10 cms. by tumor tissues in lymph nodes and in the regional muscle and subcutaneous fat. Much edema fluid was in the subcutaneous tissues here. The lymph nodes of the mesentery of the small bowel were enlarged to 3 cms. dia. The spleen weighed 85 gms., the liver 1450 gms. These viscera had no noteworthy changes grossly. The lungs were hyperemic but had nothing otherwise significant. Tumor tissues extended into the broad ligaments of the uterus from the iliac lymph nodes.

Histological examination of the enlarged lymph nodes demonstrated the presence of reticulum lymphosarcoma. Sarcoma tissues were present also in the spleen, peritoneum, small bowel, right thigh and psoas muscles, inferior vena cava, bone marrow, and kidneys.

COMMENT

The cancer history of this patient is unique. It began seven years before her death with a carcinoma of the left breast and axillary lymph node metastases which radical mastectomy and radiation therapy apparently cured. Four years later the right mammary gland was removed because of carcinoma in this tissue, again with satisfactory therapeutic results. Finally about 18 months before death, biopsy disclosed reticulum cell lymphosarcoma of the cervical lymph nodes, and the necropsy demonstrated extensive lymphosarcoma of the retroperitoneal and iliac lymph nodes. No mammary gland carcinoma tissues were found.

Aleukemic Myelogenous Leukemia and Chronic Tuberculosis

A white male aged 69 years entered St. Luke's Hospital because of urinary obstruction for one week with burning, urgency and incontinence. He had had previous attacks of this kind. While lying down he could void a little urine, but was unable to do so when erect. Occasionally he had passed "gravel". Two operations on the bladder were performed in 1912. For seventeen years this patient had had an enlarged spleen and had been examined by many physicians. He had a mild secondary anemia for which he had received four blood transfusions. A cardiac decompensation was treated with digitalis and diuretics.

When examined at St. Luke's Hospital he was somewhat dyspnoeic and orthopnic, his temperature was normal, his heart rate was 108 per minute, and his blood pressure was 130/60 mms. Hg. He had an auricular fibrillation. The spleen extended to midway between the umbilicus and the symphysis pubis. The large liver extended to the crest of the ilium. Both legs were edematous. The urine had 20 mgms percent albumin, red blood cells, leucocytes and bacteria. His blood had 3,000,000 erythrocytes and 11,150 leucocytes per cmm. and 7.7 gms. percent hemoglobin. In the leucocyte differential count the percentages were lymphocytes 20, monocyte 1, neutrophils 26, eosinophil 1, basophils 7, and immature cells 45 (4 blasts, 9 myelocytes, 14 metamyelocytes and 18 band forms). The red cells had slight poikilocytosis and anisocytosis, polychromatophilia and moderate hypochromasia; a few normoblasts were observed. The chemical examinations of the blood had no significant changes. An electrocardiogram tracing suggested myocardial damage. Roentgenograms of the kidneys, ureters and urinary bladder disclosed nothing significant. The cardiac disorder was considered to be due to atherosclerosis of the coronary arteries. With a low salt diet, diuretics, and digitalis he lost 27 pounds in weight and the edema decreased. His heart rate became 76 per minute. After a month in the hospital he had only a slight edema and ascites but the

erythrocyte level and hemoglobin could not be maintained without transfusions. The chemical elements of the blood did not change appreciably after two months and again the blood examinations demonstrated 3,420,000 erythrocytes and 18,600 leucocytes per cmm. and 10.5 gms. percent hemoglobin. The differential percentages of the leucocytes were; lymphocytes 8, monocytes 6, neutrophils 7, eosinophils 5, basophils 5, and immature cells 69 (5 blasts, 9 myelocytes, 11 metamyelocytes and 44 band forms). The erythrocytes had slight anisocytosis and hypochromia.

The patient grew worse, became stuporous and died on the 94th day in the hospital.

The essentials of the anatomic diagnosis of the necropsy are:

Aleukemic myelosis (chronic myelogenous leukemia) with:

Pleomorphic myeloid hyperplasia, myelofibrosis and osteosclerosis of the bone marrow;

Marked myeloid hyperplasia and hyperemia of the spleen (marked splenomegally), and of a small accessory spleen;

Marked myeloid hyperplasia of the biliary, omental and periaortic abdominal lymph nodes;



Figure 4. Photograph illustrating the chronic tuberculosis of the omentum.

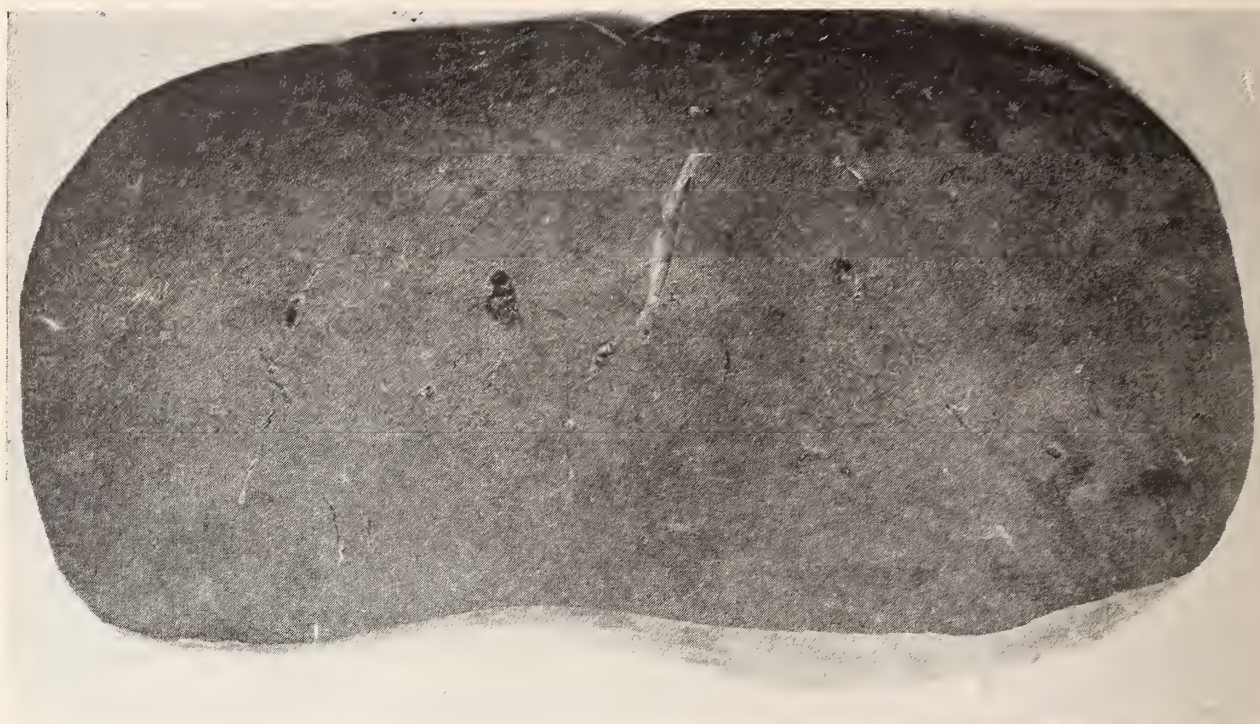


Figure 5. Photograph of a surface made by cutting the spleen illustrating the firm dark red tissues.

Moderate myeloid hyperplasia and chronic passive hyperemia of the liver;

Chronic, nodular, caseous tuberculosis of the omentum, peritoneal surface of the liver, spleen, diaphragm, small and large bowel, and of the parabronchial, mesenteric, biliary, and periaortic abdominal lymph nodes;

Marked serofibrinous and fibrous tuberculous peritonitis;

Chronic tuberculous ulcer of the colon;

Obliterative fibrous pericarditis and pleuritis, etc.

The body of this white male weighed 155 pounds. The peritoneum contained 6000 cc. of faintly yellow turbid fluid. The peritoneal surfaces were covered with fibrin. The nodular omentum, diffusely thickened as with tumor tissues, was 10 cms. long, 30 cms. wide, 2.5 cms. thick and weighed 490 gms. (Figure 4) The markedly enlarged spleen was 27 cms. long, 16 cms. wide, and 10 cms. thick and weighed 2430 gms. The grey capsule had many yellow plaques and on the diaphragmatic surface near the lower pole was a scar 4 by 2 cms. Surfaces made by cutting the spleen were red, tinged with purple and with focal regions of dark red (Figure 5). These were circumscribed, ranged from a few mms. to 1.5 cms. dia. and were slightly elevated above the surrounding tissues. The Malpighian bodies were not distinct. An accessory spleen was 1.5 cms. dia. The liver weighed 2855 gms. The capsule was roughened

by fibrous tissues and had many small grey nodules. On surfaces made by cutting, the liver tissues were red-brown mottled with yellow. The center of the lobules was red and the periphery yellow. The lumbar vertebrae had soft granular tissues, like tumor, but the sternum and the ribs were dense bone with only a small amount of marrow. The lining of the caecum had an ulcer 2.5 by 5 cms. The right pleural space was obliterated by dense fibrous adhesions, the lung tissues were hyperemic. The left lung had no adhesions and it was slightly hyperemic and edematous. The periaortic abdominal, biliary and parabronchial lymph nodes were enlarged and had firm grey tissues. The pericardial sac was obliterated by fibrous tissues. The heart weighed 510 gms. There were no valvular or myocardial changes except slight fibrous thickenings of the aortic and mitral leaflets. The urinary bladder contained seven rounded urate concretions, the largest 3 by 2 by 1 cms. and the others ranged from a few mms. to 1 cm. dia. (Figure 6) The lining of the bladder was trabeculated and hyperemic, and had an hypertrophied median bar. The prostate gland was small.

Histologic studies disclosed chronic tuberculosis of the mesenteric, biliary and periaortic abdominal lymph nodes, the peritoneum and the



Figure 6. Photograph illustrating the trabeculation of the lining, the muscular hypertrophy and the concretions of the urinary bladder.

omentum. Acid-fast bacilli were demonstrated in the tissues. The ulcer of the caecum also was tuberculous. The nodules in the spleen had a marked hyperemia of the splenic pulp and large intra- and extra-cellular deposits of granular brown blood pigment. In the tissues were many large cells like megakaryocytes with several nuclei or a large lobed nucleus and also aggregates of hematopoietic tissues containing cells of both the granular and erythroid series. These hematopoietic tissues extended into the regional splenic pulp. Some of the lymph nodes also had small masses of these tissues. The capsule of the spleen had fibroplastic tissues, histologically tuberculous. The marrow spaces of the lumbar vertebrae had a marked overgrowth of myeloid tissues. These were cellular tissues containing primitive granulocytes, myeloblasts, myelocytes, some eosinophilic, and polynuclear leucocytes. Many large multinucleated or multilobed giant cells like megakaryocytes were scattered in these tissues. At other levels there was a marked overgrowth of bone trabeculae and a fibrous tissue replacement of the marrow. Between these extremes were degrees of mixtures of these

tissues. The sternum had a dense osseous cortex with many compact lamellar trabeculae and most of the small marrow spaces contained fibrous tissue without myeloid elements. The liver had many foci of myeloid tissue with cells as mentioned. Along the capsule were fibroplastic tissues histologically tuberculous.

COMMENT

The clinical history of this patient extends over seventeen years during which time his spleen was known to have been enlarged. When opportunity was given to study the tissues post-mortem, the enlargement of the spleen was found to be associated with hyperplasia, myeloid infiltrations and hyperemia of the pulp tissues. Some of the lymph nodes and the liver also had similar myeloid tissue infiltrations. The bones revealed these changes in some portions, myelofibrosis and osteosclerosis in other portions. This patient's illness is a form of chronic myelogenous leukemia described as aleukemic myelosis. This disorder was complicated by chronic tuberculosis of the peritoneum, the abdominal lymph nodes, and the caecum. In brief, the patient had two diseases, an aleukemic form of myelogenous leukemia and an abdominal tuberculosis.

NEWS OF THE STATE



COLES

County Society Approves Health Council.—The Coles County Medical Society has approved the proposed organization of a community health council in Mattoon. At a meeting of the society November 3, Dr. John D. Hardinger was named chairman of a three member group to work in an advisory capacity for organization of the council. Other members are Dr. E. X. Link, city health officer, and Dr. Francis H. Fox.

COOK

Crib Given to Hospital in Memory of Physician.—An Armstrong automatic crib was recently placed in the nursery of West Suburban Hospital in honor of the memory of the late Dr. Louis F. Alrutz. Dr. Alrutz, who died one year ago, served as an obstetrician on the West Suburban staff for over thirty years. He had been chief of the staff for a number of years and confined his practice to obstetrics during the latter years. The crib, purchased from funds donated by a "loyal patient and friend," is a miniature ambulance-incubator, having rubber-tired casters, automatic controls for air, heat and oxygen to protect infants when being moved from nursery to other parts of the hospital. The new unit is believed by medical authorities to be "a means of saving the life of many new born babies."

Special Lectures.—The thirteenth Christian Fenger Lecture of the Institute of Medicine of Chicago and the Chicago Pathological Society was delivered at the Palmer House on Monday, January 10, 1949, at 8 p.m. by Dr. Dallas B. Phemister on "Circulatory Disturbances of the Skeletal System". The sixth Frank Billings Lecture of the Institute will be delivered at a joint meeting with the Society of

Medical History of Chicago at the Palmer House, Friday, February 25 at 8 p.m. In commemoration of the William Osler centennial, Dr. John F. Fulton, Sterling professor of physiology, Yale University School of Medicine, will speak on "Osler as a Humanist."

Institute Holds Annual Meeting.—Dr. Dallas B. Phemister, professor and chairman of the department of surgery emeritus, University of Chicago School of Medicine, delivered the presidential address at the thirty-third annual meeting of the Institute of Medicine of Chicago at the Congress Hotel, December 7. The title of his address was "The Institute of Medicine and the Medical Profession." Alfred T. Carton, citizen fellow of the Institute, gave an address on "The Institute of Medicine and the Community."

James Case Awarded Medal.—Dr. James T. Case, Chicago radiologist, returned from a trip to Mexico and Central America, recently, the proud possessor of the Merito Militar medal, conferred on him by the Mexican government.

The presentation was made last month at a ceremony in the Military Hospital in Mexico City by General Gilberto Limon, secretary of national defense of Mexico. The accompanying citation commended Dr. Case for the good will with which over the last twenty years or more he has assisted Mexican physicians and surgeons who have come to the United States for postgraduate and specialty training. Some have served as residents under him, and he has found places for others.

Dr. Case, who speaks Spanish well, has always maintained a special interest in Latin-American countries. He is the honorary consul in Chicago for the Dominican Republic and he has lectured on radiology and surgery in Lima, Santiago de

Chile, Buenos Aires, Havana and Rio de Janeiro, as well as in Mexico.

Membership in A.O.A.—Seventeen seniors and six juniors have been elected to membership in Alpha Omega Alpha, international honorary medical fraternity, at the University of Illinois.

Third and fourth year medical students whose grades rank them in the highest one-sixth of their class are eligible for membership.

Seniors who have been elected are Herbert E. Bessinger, Joseph T. Branit, Jr., Marian D. Cohen, Alvin M. Getz, Harold Goodman, Sheldon S. Gorsky, Sanford M. Izner, Elisabeth S. Lassers, Theodore R. Sherrod, and Ralph H. Swerdlow, all of Chicago.

Frank C. Bender, Oak Park; Robert L. Hare, LaGrange; Charles J. McCammon, Findlay, Ohio; Leslie T. McClinton, Loveland, Colo.; Albert J. Novotny, Berwyn; Ines M. Santos, Guayama, Puerto Rico; and John H. Schneewind, Beverly Hills, Cal.

Juniors who have been elected are Mildred J. Gylfe, Berwyn; Robert E. Lee, Kewanee; David I. Rabinov, Mokena; and Martin Pepper, Sholem Postel, and Alvin Suslick, all of Chicago.

Branch Meetings.—The North Shore Branch of the Chicago Medical Society was addressed December 7 by Dr. Robert Elman, professor of surgery, Washington University School of Medicine, St. Louis, on "Nitrogen Balance" with special reference to surgical patients and the use of intravenous feedings, and Dr. George Fenn, associate professor of medicine, Northwestern University Medical School, on "The Management of Cardiac Edema". The respective discussants were Dr. Walter Maddock, professor of surgery, Northwestern University Medical School and Dr. Albert VanderKloot, associate professor of medicine, University of Illinois College of Medicine.

Thirty Years Service Honored.—Thesle T. Job, Ph.D., Oak Park, a faculty member of the Stritch School of Medicine of Loyola, was recently honored by the school and other faculty members for his thirty years of service to Loyola. Dr. Job, a graduate of the University of Iowa College of Medicine, was born in Boone County, Iowa. He joined the Loyola staff in 1918 after serving as an instructor at the University of Iowa College of Medicine. He is currently professor and chairman of the department of anatomy and preclinical dean at the Stritch School of Medicine of Loyola.

Appointments at Illinois.—Appointments of Drs. Lewis Haas, Nathan O. Kaplan, Arthur A. Rodriguez, and Audrey Wilson to the faculty of the University of Illinois College of Medicine with the rank of assistant professor has been announced by Dean John B. Youmans.

Dr. Haas, recently appointed assistant professor of radiology, served as head of the x-ray department of the Koranyi City hospital in Budapest, Hungary, from 1945 to 1948. He also held the rank of associate

professor of roentgenology at the medical school of the State University in Budapest from 1946 to 1948.

Dr. Kaplan has been appointed assistant professor in the department of biological chemistry. Formerly a research associate at Massachusetts General hospital, Boston, Mass., he assumed his duties at the Chicago Professional Colleges on January 1, 1949.

Dr. Kaplan was associated with the Manhattan project for three years during the war. He is a graduate of the University of California at Los Angeles, and received the doctor of philosophy degree in biochemistry from the University of California, Berkeley.

Dr. Rodriguez has been appointed assistant professor of physical medicine. A graduate of the University of Illinois, he has been a member of the faculty since 1947. His first duties were to take charge of a research program in electrical stimulation of muscles in poliomyelitis patients with a new variable frequency wave generator. The program was sponsored by the National Foundation for Infantile Paralysis, and was undertaken under the direction of Drs. A. C. Ivy and H. Worley Kendall.

Dr. Rodriguez previously served as director of the fever therapy department of the Chicago Intensive Treatment Center. He is co-author of four articles dealing with artificial fever chemotherapy in early syphilis. He was a Baruch fellow in physical medicine.

Dr. Wilson has rejoined the faculty as an assistant professor of radiology following a year of residence in Phoenix, Ariz. A graduate of Northwestern University, she originally joined the faculty in October.

Improvement at Eye and Ear Infirmary.—Physical improvements costing almost \$100,000 now are nearing completion at the Illinois Eye and Ear Infirmary, 904 West Adams St.

The improvements have been made by the State Department of Public Welfare in order to make possible the handling of an increasing number of patients and to provide more adequate facilities for an expanding teaching program.

Superintendent Lester R. Gerber pointed out that the facilities previously were inadequate to care for the patient volume. More than 87,000 patient visits were made last year to the Infirmary which is staffed by the University of Illinois College of Medicine.

Recent improvements include a new suite of operating rooms, including two in the eye department and two in ears-nose-throat. Previously, the operating rooms for each specialty were separated, necessitating reduplication of nursing personnel and sterilizing equipment. As a result of the improvements, the facilities permit operative procedures of all types within the sphere of these specialties. Operations now are scheduled for the entire day.

New examination and treatment rooms have been carved out of the existing space. The waiting rooms for patients have been separated from the space allotted for examination.

In the eye department, 12 examination booths with 20-foot lanes have been constructed for refraction and examination of the patient on return visits. A central area is used for special examinations with the slip lamp, perimeter, and tonometer.

In the ear-nose-throat department, there are eight new soundproofed examination booths. A special room on the second floor also has been completely equipped for examination of hospital patients in the ears-nose-throat section.

New additions also include the establishment of a laboratory for eye pathology and another for photography. Other improvements, including tuck-pointing of the exterior of the building and the installation of a new elevator, have been made or now are being undertaken.

Research Grants.—Five research grants totaling \$22,462 have been awarded recently to the University of Illinois' Chicago Professional Colleges, Dr. A. C. Ivy has announced.

The U. S. Navy has awarded a grant of \$10,800 for continued research in the prophylaxis and treatment of experimental hypertension. The study will be conducted by the department of physiology, under the supervision of Dr. G. E. Wakerlin.

A grant of \$4,882 has been awarded by the American Society of Heating and Ventilating Engineers for studies in physiological adjustments of human beings to rapid changes in environment. The project will be conducted by the department of medicine under the supervision of Dr. W. Robert Keeton.

A \$3,780 grant has been accepted from the U. S. Public Health Service for a research project on cephalometric x-ray study of the growth of the human head from the eighth to the 15th year. It will be conducted by the College of Dentistry, under the supervision of Dr. Allan G. Brodie.

The Illinois Federation of Women's Clubs has awarded \$2,000 to Dr. Danely P. Slaughter of the Tumor clinic for a fellowship in cancer.

The American Medical Association has awarded a \$1,000 grant for studies on pancreatic function to be conducted in the department of surgery, under the supervision of Dr. Warren H. Cole.

Renewal of a yearly grant in the amount of \$2,000 from Smith, Kline and French of Philadelphia, Pa., for the support of research has been received by the University of Illinois College of Medicine.

The grant will be used in support of studies on the effects of amines in experimental renal and other hypertensions. The research will be conducted in the department of physiology by E. A. Ohler, under the supervision of Dr. G. E. Wakerlin, head of the department.

P.T.A. Discusses Health Survey.—Unit Health chairmen and other officers from the Chicago

region, Illinois Congress of Parents and Teachers, held a one-day seminar on the Chicago-Cook County Health Survey, November 29, in the auditorium of the Board of Education. Mrs. Abraham Saperstein, regional director, and Mrs. W. E. Heim, regional health and summer roundup chairman, presided. The meeting was planned in cooperation with the Council of Social Agencies of Chicago. A series of "workshops" for more detailed discussion of the survey will be held later in the season.

The opening speaker was Howard J. Shaughnessy, Ph.D., chief of the division of laboratories, Illinois Department of Public Health, who reviewed the findings of the survey and described progress made to date in putting its recommendations into effect. The survey, which was made a year ago, is a complete "audit" of Chicago's health facilities, with all shortcomings identified. It is the most outstanding effort of the sort ever made in the history of public health; many American cities are now following Chicago's example. Miss Mary Murphy, director of the Elizabeth McCormick Memorial Fund, spoke on "Health Services for Children"; Dr. Sophie S. Sloman, director, Institute for Juvenile Research, "Mental Hygiene"; Miss Edna Nicholson, director of the Central Service for the Chronically Ill, "Geriatrics and the Chronic Problem" and Miss Adelaide Spohn, Ph.D., chief of the nutrition division recently set up in the Chicago Health Department, as recommended by the Survey, also spoke. Other speakers were Dr. Edward A. Piszczek, director, Cook County Department of Public Health and Joel I. Connolly, assistant to the president of the Chicago Board of Health, discussed the organization of health services in their respective jurisdiction. Ald. Robert E. Merriam, chairman of the City Council's subcommittee on the Survey, acted as chairman.

Samuel A. Goldsmith, executive director, Jewish Charities of Chicago and chairman of the Council of Social Agencies committee on the survey, talked on the distribution of medical care in this area, and Alexander Ropchan, executive secretary of the health division of the Council of Social Agencies, summarized and interpreted the talks of all the preceding speakers.

Society News.—The Chicago Urological Society was addressed December 2 by the following physicians: James I. Farrell, Don E. Murray, Sidney J. Silbar, Milwaukee, Wis.; Russell D. Herrold, Martin Robbins, Irving J. Shapiro, Robert H. Herbst, James W. Merricks, John Baylor, Robert L. Atkinson, Roland R. Cross, Frederick A. Lloyd, Clifford W. Losh and Clifford W. Losh, Jr., both of Des Moines, Iowa; Falk Arnheim and Harry C. Rolnick. The evening program concluded a morning clinical session and a pyelogram clinic at which Dr. Vincent J. O'Connor presided. — Dr. M. A. Perlstein, Chicago, was recently guest speaker for the Tennessee Society for Crippled Children in Nashville, Tennessee.

CRAWFORD

Fifty Years as a Mason.—Dr. James Mitchell, ninety-three year old physician of Oblong, was honored November 30 by the Oblong City Lodge No. 644. A.F. & A.M., in celebration of his fiftieth anniversary as a Mason.

DE WITT

Miscellaneous News.—Dr. William R. Marshall, Clinton, secretary of the De Witt County Medical Society, reports the following news from his county: The regular monthly meeting of the De Witt County Medical Society held November 10 was a very successful session. The speakers at the meeting were Dr. W. A. Gustafson, neurosurgeon, and Dr. Claude Lambert, orthopedist, both of the University of Illinois College of Medicine. There was a good attendance of our members as well as a number of physicians from the surrounding cities. The December 8 meeting was devoted to business and the election of officers for the succeeding year. Dr. F. M. Blome, Kenney, is spending an extended vacation in the south owing to illness. We hope he will soon return in good health again. Dr. Charles S. Bogardus, Clinton, recently spent some time in Texas with his brother. The X-ray mobile unit spent a very busy ten or twelve days in our county beginning November 3 and as yet we have had no complete report on the findings of the chest X-rays taken. The De Witt County Tuberculosis Association and the De Witt-Piatt Counties Health Unit staff assisted with the work. Dr. Keith Rhea's and Dr. Sidney A. Sinow's hunting trips to Canada evidently were not any too successful as to game secured as we have neither seen nor heard of any venison steaks since their return. Now that the golf season is over we are wondering whether it will be bowling or the Business Men's Volley Ball Class at the Y.M.C.A. that will furnish the recreation for the physicians until golf time comes around again.

DU PAGE

Personal.—Dr. Samuel K. Lewis, Elmhurst, acting coroner of DuPage County since the death of Dr. Paul A. Isherwood, has been elected to the office.

LAKE

Society News.—Dr. Andrew C. Ivy, vice president in charge of the Chicago Professional Colleges of the University of Illinois, discussed "The Applied Physiology of the Gall Bladder and Sphincter of Oddi" before the Lake County Medical Society in Waukegan recently.

Personal.—Dr. Josiah J. Moore, Chicago, has been appointed as staff pathologist by the governing board of Condell Memorial Hospital. Dr. Joseph Raider, Mundelein, is serving as president of the medical staff this year.

MACON

Society Cooperates in Work on Handicapped Children.—Macon County doctors are being called on to assist in a survey on the educational aspects of handicapped children from three to six years old which is being concentrated this year in Decatur by the State of Illinois. On September 1, 1948, Mrs. Mary Boynton, Chicago, and Miss Genevieve Drennen, Warren, Ohio, specialists in medical social work and education, set up research headquarters in the public health office next to Gastman School in Decatur.

The survey is directed to children at this early age for education in group activities under specially trained teachers. The present survey is concerned with education. For this the state law provides chiefly financial help and technical recommendations to local programs. The active program would be the responsibility of the community. From the survey in Decatur and in one metropolitan and one rural area, the State will base its recommendations for all other programs.

MADISON

Society News.—"Intracranial Space Occupancy Lessons" was the title of a talk by Dr. Leonard T. Furlow, St. Louis, before the Madison County Medical Society, December 2.

MARION

Society Election.—At a recent meeting of the Marion County Medical Society, Dr. Maurice Horsman, Salem, was elected president. Other officers are Dr. Harold E. Snow, vice president and Dr. Max Hirschfelder, secretary-treasurer, both of Centralia. Dr. Leo Eschelbacher, Mount Vernon, addressed the meeting on "Angina Pectoris."

MC HENRY

Christmas Party.—The McHenry County Medical Society devoted its meeting, December 16, at the Fiesta, Crystal Lake, to a Christmas Party, at which the wives were guests.

MC LEAN

Community Hall Named for Physician.—A building formerly intended as an office for Dr. Charles R. Kerr, first McLean County physician to die in World War II, has been acquired by the town of Chenoa and will be remodeled and dedicated as a community building in memory of the doctor. Dr. Kerr was one of the victims of the "death march" on Bataan in the Philippine Islands. He served in World War I and was an active member of the officers' reserve corps. The building in Chenoa that will be dedicated to the physician's memory, was built by Dr. Kerr and was to be used as his own office headquarters after the war. It was unfinished and had not been occupied at the time Dr. Kerr was

called into active service in 1940. Late in November, the town of Chenoa received title to the property. Some of the heirs gave their share and some sold their share to the Chenoa rural fire association which in turn donated its share to the town. When the remodeling is completed it will house city hall headquarters, meeting rooms for local organizations and public rest rooms to be open every day and evening.

Staff Pledges Fund for Hospital Building.—The Brokaw Hospital medical staff has pledged to raise \$100,000 from members of the staff for the hospital's building fund campaign, it was announced November 23. Some of the money will be applied to the construction of the first floor of the new patient wing.

PEORIA

Society News.—Dr. Lloyd E. Harris, Rochester Child Health Institute, Mayo Clinic, addressed the Peoria Medical Society, November 16 at the Hotel Pere Marquette, on "Behavior Problems in Infancy and Childhood." The society was addressed December 7 by Lt. Col. John R. Hall, Jr., U. S. Army Medical Corps, on "Atomic Bomb Injuries and Their Treatment."

SANGAMON

Personal.—Drs. James E. Graham and Kenneth D. Kohlstedt, both of Springfield, have been elected to the fellowship of the International College of Surgeons.

Society News.—Dr. Geza de Takats, professor of surgery, University of Illinois College of Medicine, addressed the Sangamon County Medical Society, December 2, on "Hypertension."

TAZEWELL

Hospital Staff Election.—Dr. J. I. Weimer was elected 1949 president of the Pekin Public Hospital medical staff at a meeting recently. He succeeds Dr. S. T. Glasford whose faithful service in this executive capacity was highly commended by appreciative members. Vice-president for the coming year is Dr. A. H. Claycomb and Dr. Robert Dunlevy was reelected secretary.

Personal.—Dr. Harold D. Feldman and Dr. Lloyd Finley Teter, both of Pekin, have been elected to fellowship in the International College of Surgeons.

WHITESIDE

Society Election.—Dr. L. C. Johnson, Tampico, was elected president of the Whiteside County Medical Society at a meeting in Sterling, November 8. Other officers are Dr. J. H. Hollander, Morrison, vice president; and Dr. Glenn J. Pohly, Rock Falls, secretary-treasurer. Dr. Albert Liederman was designated to represent the society at the Sterling-Rock Falls Jaycees welfare committee. Dr. Lester S. Reavley is the society's delegate to the Illinois State Medical Society.

WILL

New Health Officer.—Dr. W. V. Hedges, Frankfort, has accepted the position of Will County health officer until a permanent officer can be secured. Dr. Robert Kleinhoff has acted in this capacity temporarily since the resignation of Dr. Charles Kincaid who accepted a position in Madison, Wis. Dr. Hedges, who has practiced medicine and surgery for the past forty years, has also been health officer for Frankfort and vicinity for many years. He has been relieved from much of his private practice by Dr. Claude Otto and Dr. W. H. Cave.

GENERAL

Meeting of Pathologists.—The North Central Regional Meeting of the College of American Pathologist was held at the University of Illinois College of Medicine, December 18. Speakers on the program included Dr. Samuel Levinson, "The Medical Legal Practice of Pathology"; Brig. Gen. Raymond O. Dart, director, Army Institute of Pathology, Washington, D. C., "Relationship of the Army Institute of Pathology to the Pathologist"; Dr. Granville A. Bennett, "Differential Diagnosis in Certain Lesions of Bones and Joints"; Dr. Paul C. Bucy, "Brain-Tumors" and Dr. Hans Popper, "Diagnosis of Liver Damage by Functional and Morphologic Methods."

N. U. Dean is New Head of Association of Medical Colleges.—Dr. J. Roscoe Miller, dean of the Northwestern University Medical School who will succeed to the presidency of the University next July, was installed on November 10, as president of the Association of American Medical Colleges. The ceremony took place at the meeting of the Association in the Greenbrier Hotel, White Sulphur Springs, W. Va. Dr. Miller is also president of the Chicago Medical Society.

HEALTH DEPARTMENT ACTIVITIES

Total of Examinations in State Cancer Clinics.—During the two-year period ending June 30, 1948, a total of 4,907 residents of Illinois entered state-aid cancer diagnostic clinics for examination, Dr. Roland R. Cross, state director of public health, announced recently. Of this group, 2,004 "proved" cases of cancer were discovered, Dr. Cross said. The report also showed that 13,272 follow-up examinations were made on these patients.

The state department now provides financial assistance to 19 cancer diagnostic clinics, operating at strategic locations throughout Illinois. Plans have also been approved for the establishment of such a clinic at Aledo upon completion of the new hospital now under construction there, according to Dr. Cross.

In addition to giving free examination service to patients referred by physicians, each of these clinics maintains a free tissue diagnostic service for patients who cannot afford the cost of this procedure. The report shows that 3,634 tissue examinations were made during the two years.

Dr. Cross cited the high death rate from cancer in Illinois, pointing out that the disease took the lives of 9,047 persons during the first eight months of this year, or a little more than 1,100 per month.

"Many of these lives could have been saved," he said, "if their disease had been discovered early and treated properly with X-ray, radium or surgery."

MARRIAGES

DR. ROBERT DUNCAN, La Salle, to Miss Jane Ruth Weymouth, of Avalon, Wisc., recently.

DR. NELLIE E. MARSH, Aledo, to Mr. Howard N. Osborn of Tulsa, Okla., recently.

DEATHS

AUGUST HARVEY BAUER, Chicago, who graduated at Rush Medical College in 1910, died September 3, aged 65, of carcinoma of the liver.

ARTHUR M. BUTZOW, Chicago, who graduated at Rush Medical College in 1898, died November 28, aged 74. He had practiced medicine in Chicago for 50 years.

RICHARD LAWRENCE CAMPBELL, East St. Louis, who graduated at Washington University School of Medicine, St. Louis, Mo., in 1900, died November 24, aged 80. Was former president and secretary of the St. Clair County Medical Society and former president of the East St. Louis Board of Education.

FRANK HENRY DILLON, Colchester, who graduated at St. Louis College of Physicians and Surgeons in 1909, died November 6, aged 63. He had been a patient in St. Francis Hospital, Macomb since suffering injuries in an automobile accident on October 26.

WILLIAM SCOTT HARTFORD, Champaign, who graduated at Hering Medical College in 1906, died November 6, aged 64, in Glendale, California. He had practiced medicine in Champaign for many years.

WILLIAM E. HELM, Chicago, who graduated from National Medical University, Chicago, 1903, died September 29, aged 69, of coronary thrombosis and hypertension.

EDGAR REA HOLMES, retired, Minier, who graduated at University of Illinois College of Medicine in 1887, died November 16, after a long illness, aged 60. He was a member of the Illinois State Medical Society "Fifty Year Club."

VICTOR H. HORNING, Chicago, who graduated from Loyola University School of Medicine in 1912, died December 3, aged 66. He was assistant chief surgeon for the Chicago and Northwestern Railroad for 30 years.

HOWARD N. LYON, retired, Chicago, who graduated at the Hahnemann Medical College and Hospital, Chicago, in 1888, died November 30, aged 82. He had practiced medicine in Chicago for 60 years, moving to Yorkville after his retirement two years ago.

EDWIN J. MEYER, Chicago, who graduated at Harvey Medical College, Chicago, in 1913, died November 10, aged 65. He was formerly associate clinical professor of medicine at Loyola University School of Medicine.

HUGH E. MORRISON, Chicago, formerly of Freeport, who graduated at Chicago Homeopathic Medical College in 1891 died November 7, aged 78.

LUTHER JAMES OSGOOD, Waukegan, who graduated at Northwestern University Medical School in 1903, died November 6, aged 72. He was formerly associate professor of medicine at Northwestern University Medical School.

EUGENE ALFRED RICCIO, Chicago, who graduated at Marquette University School of Medicine, Milwaukee, 1928, died in Cicero, Ill., October 3, aged 45, of coronary thrombosis.

HARRY E. STOWELL, retired, Chicago, who graduated at Reliance Medical College, Chicago, in 1911, died December 9, aged 64. He retired in 1944 and moved to Peoria.

HARRY E. WILSON, Centralia, who graduated at Keokuk Medical College, College of Physicians and Surgeons, Keokuk, in 1901, died November 13, aged 76. He had practiced medicine in Sandoval and Beecher City before moving to Centralia 40 years ago.

JULIAN W. ZINN, Dwight, who graduated at Cincinnati College of Medicine and Surgery in 1888, died November 28, aged 85. He had practiced medicine for 60 years in Will and Livingston Counties.

"FOR THE COMMON GOOD"

WGN-TV Offers Medical Telecast.—"Diabetes — Under Control" was the title of a public information program over WGN-TV, December 16, under the auspices of the Educational Committee of the Illinois State Medical Society in cooperation with the Chicago Diabetes Association. Participants were Drs. Henry T. Ricketts, associate professor of medicine, University of Chicago School of Medicine, and Chester Coggeshall, associate in medicine, Northwestern University Medical School. Miss Barbara Ruby, dietitian at the University of Chicago School of Medicine, and a 9 year old diabetic, also appeared, as did a diabetic mother with her two children born since she developed the disease. Mr. Cosmo Genevese produced and directed the show and Mr. George Bauer acted as Emcee. The show ran for 30 minutes and depicted dramatic incidents in the story of diabetes. Mr. Jay Faraghan was program director. The cooperation of the staff of WGN-TV and Dr. Theodore Van Dellen is acknowledged and appreciated.

Lectures Arranged Through the Educational Committee of the Illinois State Medical Society; Charles P. Blair, Monmouth; Warren W. Furey, Chicago, Vice Chairman:

Mr. John Bach, Press Relations, AMA, Gold Coast Lions Club, in Chicago, November 17, Pick-pocket Medicine.

Leo Kaplan, Chicago, Washington School PTA in Waukegan, November 30, Behavior Problems in Parents.

Chester Coggeshall, Woman's Auxiliary, South

Chicago Branch, Chicago Medical Society, December 6, Early Detection of Diabetes.

Charles Runner, Good Neighbor Society in Chicago, January 6, Child Health.

Jules Masserman, Chicago, the Chicago Town Hall and Club, January 16, Psychiatry Faces the Challenge of 1949.

Edward A. Piszczek, Chicago, Chicago Town Hall and Club, January 30, To Your New Look for Better Health in 1949.

Leo Kaplan, Chicago, Physicians Fellowship Club Auxiliary in Chicago, February 11, Growing Old Gracefully.

Walter Tobin, Chicago, Illinois Federation of Women's Clubs, February 14, on Heart Disease with Particular Reference to Rheumatic Fever.

Zelda Teplitz, Chicago, Chesterfield Woman's Club in Chicago, February 15, on Mental Hygiene.

Lectures Arranged Through the Scientific Service Committee of the Illinois State Medical Society; Robert S. Berghoff, Chicago, Chairman; Louis Limarzi, Chicago, Vice Chairman:

Joseph Greengard, Chicago, Will-Grundy County Medical Society in Joliet, February 10, Immunization Procedures in Children.

Frank Deneen, Bloomington, Logan County Medical Society in Lincoln, February 17, Diseases of the Thyroid: Diagnosis and Treatment.

Wayne W. Flora, Chicago, Will-Grundy County Medical Society in Joliet, February 24, on Primarily Benign Tumors of the Rectum and Colon, illustrated.

FIFTY PER CENT OF INDUSTRIAL WORKERS PROTECTED AGAINST WAGE LOSS

In a study of 1,150,000 establishments, in industries covered by unemployment compensation, the Research Council for Economic Security found that about 50 per cent of the employees enjoy some degree of protection against wage loss

during illness. A total of 30,000,000 workers was tallied for the study.

The Council states in its report, "In every state, with or without compulsory legislation, employers realize the need to protect their workers against wage loss during disability, and have extended such protection on a voluntary basis."

Minnesota Medicine

Nov. 48

The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

**EDITOR — Harold M. Camp. EDITORIAL BOARD — James H. Hutton, Chairman,
Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher,
Harry Culver, Walter Stevenson, Raymond W. McNealy.**

Vol. 95, No. 2



February, 1949

THE HEAT IS ON

On January 5, the President of the United States delivered the annual "State of the Union" address. In this address, the President said, "The Government has still other opportunities to help raise the standard of living of our citizens. These opportunities lie in the field of social security, health, education, housing, the civil rights." "We should expand our social security program, both as to size of benefits and extent of coverage against the economic hazards due to unemployment, old age, sickness and disability.

"We must spare no effort to raise the general level of health in this country. In a nation as rich as ours, it is a shocking fact that tens of millions lack adequate medical care. We are short of doctors, hospitals and nurses. We must remedy these shortages. Moreover, we need—and we must have without further delay—a system of prepaid medical insurance which will enable every American to afford good medical care."

It is reported that on the first day of the opening of Congress before which the President's address was delivered, there were introduced in the House 572 bills and 92 resolutions, while in the Senate there were introduced 238 bills and 37 resolutions. It is quite obvious that the 81st Session will be an unusually busy one.

Senate Bill No. 5, introduced by Senators Murray, Wagner, Pepper, Chavez, Taylor and McGrath, provides a national health insurance and public health program. The bill was referred to the committee on labor and public welfare. Many other bills referable to health, research, hospital construction and hospitalization, foods, nutrition, social security and specific diseases were likewise introduced and referred to committees at the opening session.

One interesting bill, introduced by Representative Harris of Arkansas, would create an executive department of the Government to be known as the Department of Health, Education and Security. The bill was referred to the Committee on expenditures in the Executive Department.

From reports which have been received from Washington during the opening days of the Session, it seems quite obvious that the President and others will exert all possible influence and pressure to get early action on many of these bills.

It is generally known throughout the nation that the United States now has more doctors in proportion to the population than does any other country in the world. The statement of the President that "tens of millions" of American people lack adequate medical care would be most difficult to prove; and many comments have

appeared in the press through editorials and other releases which are considerably at variance with the President's statements.

Likewise, it is generally known that Mr. Oscar Ewing, Federal Security Administrator has been making frequent talks by radio, and before many groups, demanding the early setting up of such a national health insurance program as has been recommended by the President himself.

In considering this problem which would affect all citizens of the United States (with the possible exception of the indigent) we should give primal consideration to the cost of such a program and the type of care the insured would receive. We have been getting many reports from Great Britain, as well as other countries, where medical care is now nationalized, and there is indeed much food for thought in these reports.

A few days ago, we were handed a copy of a letter from a young man in Scotland who wrote to his friend in Illinois commenting on the present situation in his country. He is a clerk and sub-manager for the Bank of Scotland. His salary is equivalent to \$1,200 per annum plus a bonus of about \$180.00 or a total income of approximately \$1,400.00. His income tax amounts to about \$120.00, and the insurance assessment \$145.00. He made this interesting comment; "I have no time for the present Government, and personally would like to see Scotland on its own, not just a suburb of London as some English think." His comments likewise were not at all favorable to the present social insurance program now under way in His country.

In his recent talks, Mr. Ewing does estimate the probable cost for the first three years, if and when the proposed social security program is approved and the compulsory health insurance plan is placed in operation, although he admits that during the first three years the benefits will be less limited than they will be in a few years. He would not, apparently, even venture an opinion as to the probable cost in ten years, and thereafter.

An interesting editorial appeared in the January 15 issue of the Journal of the American Medical Association relative to the statements of President Truman, and in which it is shown that many of these statements are not in any way proven by available factual data. The editorial states: "The final sentence of Mr. Tru-

man's recommendation brings some interesting thoughts. The first time, he uses once the words 'adequate medical care' and the second time 'good medical care', whereas Mr. Ewing usually says 'proper medical care'. What is needed at this time is a definition by some appropriate agency of these terms 'adequate', 'good', and 'proper'. There is plenty of evidence that the kind of medical care given in other countries under such systems as that proposed for the United States has no resemblance to the quality of medical service that now prevails in the United States.

"Apparently what the proponents need is some adequate, good, or proper term to characterize the kind of medical care they refer to. The medical profession contends that it is provided by the government following taxation of all the workers of the country; a proper term would be nationalized, bureaucratic, governmental or socialized medical care."

It is stated in this editorial that it is estimated that at this time, 52 million Americans are insured against the costs of hospitalization, 31 million against loss of income due to disability, 26 million against surgical expense and 9 million against medical expense. This is undoubtedly the most rapid rate of growth of any form of prepaid medical insurance on a voluntary basis that the world has ever known, and it is not compulsory. It is extremely difficult to determine accurately at any given time the exact number of American people who are insured under these voluntary programs as the number increases materially each day, and will, no doubt, continue to do so.

Mr. Ewing in his recent appearance with Governor Stassen discussing compulsory health insurance, made the story so easy that it would naturally appeal to many of our people. He intimated that under his proposed program, the sick could have the doctor of choice, receive the desirable care, then the government in turn, would be responsible for the physician's bill. From information at hand at the moment, this is not at all in accord with the proposed legislation which has been introduced in the Congress, and surely is not the plan as provided under the old Wagner-Murray-Dingell Bills. We are told that the Senate Bill number 5, is really the same bill as S. B. 1320 introduced at an earlier session.

The American people need the truth, and all of it, before deciding whether or not they actually want the government to take over medical care. First, as to the costs, both primarily and subsequently — up to now, we have seen no statement as to the probable cost 10 years after such a program is placed in operation. Then, the type of medical care they may expect under such a plan—this can easily be determined by information coming regularly from Great Britain, and other countries where medicine is now nationalized. The fact remains also, that they pay regularly as a tax, whether or not they actually need medical care.

Those able to pay for everything they may want, or get, likewise must pay their share of the taxation for the same purpose, regardless of desire or actual need. These are a few of the things the people need to know, and that information should be made generally available everywhere at the earliest possible moment.

ANDY HALL, M.D., HONORED ON 84th BIRTHDAY

When Doctor Andy Hall of Mount Vernon returned from Dahlgren Saturday evening, January 8th, where he presided at a meeting honoring Dr. D. F. Whited, he found that a dinner honoring him on his 84th birthday had been planned at the Emmerson Hotel, as a surprise affair.

Doctor Hall is known to most of the medical profession throughout the state. He has served as Director of the Department of Public Health; secretary of the Jefferson-Hamilton County Medical Society, and for many years was the Councilor from the Ninth District, representing his societies on the Council of the Illinois State Medical Society in an outstanding and clear-cut manner.

Eighty-four guests attended the party, and each sent greetings to their outstanding veteran physician. The greetings were mounted in a scrap book and were read aloud at the dinner. In acknowledging these greetings, Doctor Hall stated that as his contemporaries had gone from this life, he had always endeavored to make new friends among the younger generations. During his lifetime many "useful gadgets" have

come into use, the telephone, radio, automobile, electric motor, etc., but, "The greatest benefactor to mankind has been the physician, trying to solve the cause, cure and prevention of disease".

In a letter to the secretary's office, Doctor Hall stated: "Three friends invited me to take dinner with them at the Emmerson Saturday evening. You can imagine my surprise when almost one hundred guests arose and began to sing "Happy Birthday to You"!

He adds, "This leaves me in good health and working every day. I did not do much hunting this year, only out twice. My hunting companion got his left eye shot out, and my dog went lame, so it put me out of the hunting business for this season."

And so a grand physician, friend and citizen was honored and helped to celebrate "being 84 years young".

SCIENTIFIC PRESENTATIONS, 1949 ANNUAL MEETING

The Committee on Scientific Work (officers of the various sections) is working on the scientific program for the 1949 meeting. The officers of each section are responsible for the programs to be presented before the short section meetings planned. If you desire to present a highly specialized paper before your own section, you should contact the secretary giving him information which will assist him in evaluating the material you have to offer.

If you desire to present a paper in your specialty before the General Assembly planned primarily for the general practitioner, you should get in touch with the Executive Committee of the Committee on Scientific Work. This group has the responsibility of planning all programs for the General Assemblies during the meeting. Write to the chairman and give him information on your paper in detail, since only three men from each specialty will be chosen to appear before the Assemblies.

The personnel of this Executive Committee is:

Dr. Eugene McEnery, Chairman, 4458 West Madison Street, Chicago

Dr. James P. Simonds, Vice-Chairman, 303 E. Chicago Ave., Chicago

Dr. John H. Gilmore, Secretary, 720 N. Michigan Avenue, Chicago

Dr. John L. Kelley, Assistant Secretary, 30 N. Michigan Ave., Chicago

The complete group of section officers for the 1949 meeting are:

SECTION ON MEDICINE:

Chairman: J. C. Redington, Galesburg
Secretary: Edward Bigg, 8 S. Michigan Ave., Chicago

SECTION ON SURGERY:

Chairman: David B. Freeman, 1630 Fifty Ave., Moline
Secretary: John L. Keeley, 30 N. Michigan Ave., Chicago

SECTION ON EYE, EAR, NOSE AND THROAT:

Chairman: Perry E. Duncan, Springfield
Secretary: Richard C. Gamble, 30 N. Michigan Ave., Chicago

SECTION ON PUBLIC HEALTH & HYGIENE:

Chairman: Jerome J. Sievers, Springfield

Secretary: John B. Hall, Jr., 737 S. Wolcott Ave., Chicago 12

SECTION ON RADIOLOGY:

Chairman: John H. Gilmore, 720 N. Michigan Ave., Chicago

Secretary: Harold L. Shinall, St. Joseph's Hospital, Bloomington

SECTION ON PEDIATRICS:

Chairman: Eugene T. McEnery, 4458 W. Madison Street, Chicago 24

Secretary: George L. Drennan, Jacksonville

SECTION ON OBSTETRICS & GYNECOLOGY:

Chairman: W. C. Scrivner, East St. Louis

Secretary: John R. Wolff, 30 N. Michigan Ave., Chicago 2

SECTION ON PATHOLOGY:

Chairman: James P. Simonds, 303 E. Chicago Ave., Chicago

Secretary: George Milles, 411 West Dickens Ave., Chicago 14

U. S. COMPARATIVELY WELL SUPPLIED WITH DOCTORS

The United States has more doctors in proportion to population than any other country except Jewish Palestine, where there are great numbers of refugee physicians, points out an editorial in the January 1 issue of The Journal of the American Medical Association.

In a broadcast over the Mutual Chain entitled "Meet the Press" early in December, Oscar R. Ewing, Administrator of the Federal Security Agency, was asked the question, "Do you know of any country that has more doctors in proportion to its population than the United States?"

To this Mr. Ewing replied, "I don't. . . . I just don't know the answer one way or the other.

Whether there are or aren't. I can't tell you."

For the information of Mr. Ewing and of others who may not know how the United States ranks in proportion of doctors to population, The Journal editorial presents a recent table based on a survey conducted in 1948 by the World Medical Association.

The United States rate of 710 persons for each physician may be compared to 260 for Jewish Palestine, 870 for Great Britain, 950 for Denmark, 970 for Canada, 1,100 for Australia, Switzerland, Sweden, Spain, Norway, and the Netherlands, 1,300 for France, 1,500 for Eire and Bulgaria, 2,200 for Finland, 2,400 for the Union of South Africa, 4,200 for Egypt, and 25,000 for China.

MEDICAL ECONOMICS

The Medical Economics Committee. Chauncey C. Maher, Chmn., Hubert L. Allen, Emmet B. Bay, Edwin F. Baker, Carroll Birch, Thomas C. Browning, Roland R. Cross, James Graham, George Halperin, Edwin S. Hamilton, Ford K. Hick, Edwin F. Hirsch, May McDonald Milligan, Marie Wessels, Walter M. Whitaker, Holland Williamson.



The Role of the General Practitioner in the Modern Hospital

Among the more vexing problems which beset medicine today is that of fitting specialists and general practitioners into a cooperative body of doctors capable of practicing harmoniously together. The situation has many aspects, most of which have been and are being exhaustively discussed by medical organizations throughout the country. The phase of the problem which is of immediate interest for purposes of this discussion concerns the hospitals, particularly the smaller institutions which are not connected with medical schools.

Two distinct trends are beginning to alter the practice of medicine in these smaller hospitals: (1) More and more young doctors are seeking specialty training with a view to limiting their future work to one or the other fields, and (2) the smaller hospitals are tending to emulate the teaching institutions by developing organized, departmentalized staffs. A brief consideration of these trends will show that they have a profound effect upon the status of general practitioners in these hospitals.

There are many reasons why young men are turning to specialization. They have been dealt

with voluminously elsewhere, and it is only necessary to list a few: teachers in medical schools are specialists, and university hospitals are staffed by them exclusively; during the last war, specialists in the service received preferential treatment in regard to rank and duty assignment; in general, the specialist has easier hours and a greater financial return for his efforts than does the general physician; public and profession alike have endowed the specialist with more prestige than the man in general medicine. These, and other considerations, have created a growing demand for specialty training. In response to this demand, new internships and residencies have been created in the teaching hospitals. When these centers have been unable to keep pace with the number of young doctors seeking residencies, a large number of them have gone out into the smaller institutions. Their presence in these small hospitals has created another problem for the general practitioner, which will be noted later.

Many medical spokesmen have called the trend toward specialization "alarming", and medical educators are casting about for some method

of glamorizing general practice in order to persuade more of their students into that field. These efforts are not likely to succeed, as long as it remains more difficult to be a specialist than to be a general practitioner. The American public in general and doctors in particular are suspicious of any scheme which promises them "something for nothing". At any rate, certification by the specialty Boards has become a highly sought prize, with the result that more and more young men are presenting themselves as candidates for examination, and a mounting number of young diplomates are entering practice in smaller communities, away from the crowded urban centers.

The second trend which was mentioned as affecting the lot of the general physician is that toward organized staffs in the small hospitals. In line with recommendations of the American Medical Association, the American College of Surgeons and other interested bodies, many hospitals are adopting minimum standards of practice designed to improve the quality of work which goes on within their portals. This involves organization of various departments: Medicine, Surgery, Obstetrics and Gynecology, Pediatrics and EENT, each headed by its chief of service, usually specialists or men who are recognized as being proficient in the particular field. Full time pathologists and radiologists are being appointed. Hospital governing boards have begun to scrutinize closely the qualifications of doctors making application to their staffs, and to classify them with respect to the type of patients they may care for and the amount of work they may be permitted to do. Any attempt to evaluate doctors is extremely difficult. The man with adequate training in a special field who desires to limit his work to that field is not much of a problem; nor is the general physician who does not wish to do surgery and is willing to call a consultant in critically ill or complicated cases. The difficulty lies in assessing the qualifications of the man who does not possess formal or preceptorship training in surgery, who seeks major privileges in that field, and in all the others as well.

Perhaps the hospitals are going too far when they attempt to organize departments and grant privileges therein. Yet, the alternative seems to keep the hospital staff entirely "open", grant-

ing the facilities of the operating room to every physician who has the temerity to use them. It is beyond the scope of this essay to discuss the evils of fee-splitting and "ghost-surgery", but it is the medical profession's effort to do away with these dubious tactics which is largely responsible for the changes in hospital staff regulations. Whether or not the resulting restrictions are effective or desirable, the future will have to decide; but doctors will have to recognize that they are being judged by organized medicine itself, and not by some extrinsic, nonmedical authority.

With increasing numbers of young specialists coming into the smaller communities, and with the small hospitals in those communities disposed to withhold major privileges from doctors who lack formal training, what is the effect upon the general practitioner? The older, established men are not likely to be affected at all: hospital boards will scarcely be inclined to demote men who have enjoyed major privileges over a number of years. Younger applicants to the staff will notice the restriction chiefly in the surgical field. Their work will tend to be limited to general medicine, normal obstetrics and emergency room surgery. This in itself causes little complaint; it is the fact that there is no opportunity to change one's original status which arouses bitterness on the part of the young general physicians. They feel that they should be privileged to assist the surgeon on cases which they refer, to collect a fee for the assistance, and finally to perform their own surgery after helping in enough operations to learn the various techniques. In the matter of assisting at surgery, these doctors are in direct conflict with the resident staff, who feel with some justice that they should act as assistant on cases which they work up. However, who are emerging from excellent teaching centers and setting up their practices in communities formerly considered too small to support them.

It may be that a major depression will alter the present trends toward specialization and hospital staff organization. But far from doing anyone any good, it will probably only increase the number of general practitioners as competition sharpens and some specialists find that their

own fields are too narrow for them to earn a living.

It is not apparent that the general practitioner is being discriminated against except, perhaps, in the field of surgery. Yet the belief that the mastering of a few operative techniques entitles one to regard himself as a surgeon is fallacious. It betrays a conviction that the whole process

of surgical education aims at the teaching of technique, failing to recognize the greater objective of such training which is to instill into the student a set of ideas loosely known as "surgical judgment" — actually, sound knowledge of basic anatomy, physiology and pathogenesis of surgical lesions. Such things can be acquired only by hard work and diligent study.—H. L. A.

WEST COAST FIRM EMPLOYED TO DIRECT A. M. A. CAMPAIGN

The American Medical Association has announced that Clem Whitaker and Leone Baxter, managers of a public relations firm which has its home offices in San Francisco, have been retained as public relations counsel to direct a broad program of public education.

The firm of Whitaker & Baxter, said Dr. George F. Lull, secretary and general manager of the American Medical Association, will campaign "to promote voluntary health insurance and alert the American people to the danger of a politically-controlled compulsory health system."

Since the St. Louis meeting, the A.M.A. Board of Trustees adopted a recommendation of its executive committee to establish the 10-doctor Planning Committee, which will govern the over-all policies of the campaign.

This Planning Committee will consist of four members of the Board of Trustees and officers, and three from the House of Delegates, with the President, the Chairman of the Board and the Secretary and General Manager serving as ex-officio members, all of whom will have voting powers. As a result, the Planning Committee will consist of:

Drs. Edwin S. Hamilton, Kankakee, Ill.; Gunnar Gundersen, La Crosse, Wis.; Walter B. Martin, Norfolk, Va.; and Louis H. Bauer, Hempstead, N. Y., all members of the Board of Trustees; Drs. William Bates, Philadelphia; John W. Cline, San Francisco, and R. B. Robins, Camden, Arkansas, all members of the House of Delegates; President R. L. Sensenich, South Bend, Ind.; Chairman of the Board of Trustees,

Elmer L. Henderson, Louisville, Ky., and George F. Lull, Chicago, secretary-general manager of the A.M.A.

Dr. Lull said that the campaign would be directed from a Chicago and Washington office, working closely with A.M.A. headquarters and with the association's public relations department.

Mr. Whitaker and Miss Baxter directed the campaign of the California Medical Association which defeated the program of compulsory health insurance proposed in that state by Gov. Earl Warren.

Four years ago, only about 2,500,000 California citizens were enrolled in voluntary health insurance plans. Today, as a result of the state association's continuing educational campaign, there are more than 100 voluntary health insurance systems operating in California, with more than 5,000,000 insured members — a million more than Governor Warren promised to care for under his compulsory program.

After a preliminary study, Mr. Whitaker announced that the A.M.A. public education campaign would be built around the following three objectives:

1. To awaken the people to the danger of a politically controlled compulsory health insurance system.
2. To acquaint the people with the superior advantages of American medicine over the government-dominated medical systems of other countries.
3. To stimulate the growth of voluntary health insurance systems and prepaid medical care plans to take the economic shock out of illness and increase the availability of medical care to the American people.

CORRESPONDENCE



THE FIFTH CLINICAL CONFERENCE

The Chicago Medical Society is extending all physicians a most cordial invitation to come to Chicago for their Clinical Conference, March 1, 2, 3, 4, 1949. The preliminary program follows.

TUESDAY, MARCH 1

8:30 a.m. "Bleeding in the Last Trimester of Pregnancy."

Dr. John W. Harris, Professor of Obstetrics and Gynecology, the University of Wisconsin; Obstetrician and Gynecologist in Chief, State of Wisconsin General Hospital, Madison, Wisconsin.

9:00 a.m. "Treatment of Rheumatic Fever and Prevention of Recurrences."

Dr. Robert L. Jackson, Associate Professor, Department of Pediatrics, The State University of Iowa, Iowa City, Iowa.

9:30 a.m. "Fractures in Children are Different."

Dr. Walter P. Blount, Attending Staffs of Columbia and Milwaukee Children's Hospitals, Milwaukee, Wisconsin.

11:00 a.m. "Diagnosis of Testicular Tumors."

Dr. Charles B. Huggins, Professor of Surgery (Urology) Head of the Department of Urology, University of Chicago School of Medicine, Chicago, Ill.

11:30 a.m. "The Diagnosis of Congenital Heart Disease by Angiography and Aortography."

Dr. Wendell G. Scott, Associate Professor of Clinical Radiology, Washington University, St. Louis, Missouri; Reserve Consultant to the Bureau of Medicine and Surgery, United States Navy Department.

1:30 p.m. "Ocular Manifestations in Systemic Diseases."

Dr. W. L. Benedict, Professor of Ophthalmology, University of Minnesota Graduate School of Medicine, Mayo Foundation; Head of a section on Ophthalmology, Mayo Clinic, Rochester, Minnesota.

2:00 p.m. "Dangers to the Public in Socialized Medicine."

Dr. Roscoe L. Sensenich, President of the American Medical Association, South Bend, Indiana.

2:30 p.m. "Puzzling Functional Syndromes."

Dr. Walter C. Alvarez, Professor of Medicine, Mayo Foundation, University of Minnesota; A Senior Consultant, Division of Medicine, Mayo Clinic, Rochester, Minnesota.

4:00 p.m. "Fractures of the Skull."

Dr. Paul C. Bucy, Professor of Neurology and Neurological Surgery, University of Illinois College of Medicine, Chicago, Illinois.

4:30 — 5:30 p.m. Clinicopathologic Conference.

WEDNESDAY, MARCH 2

8:30 a.m. "Causes of Low Back Pain in the Older Patient."

Dr. LeRoy H. Sloan, Professor of Medicine, University of Illinois College of Medicine, Chicago, Illinois.

9:00 a.m. "The Sciatica Problem."

Dr. Bernard J. Alpers, Professor of Neurology, Jefferson Medical College, Philadelphia, Pennsylvania.

9:30 a.m. "Recent Developments in Anticoagulant Therapy."

Dr. Ovid Meyer, Chairman of the Department of Medicine, University of Wisconsin, Madison, Wisconsin.

11:00 a.m. "Treatment of Pneumococcal Pneumonia with Single Daily Dose of Penicillin."

Dr. M. A. Blankenhorn, Professor of Medicine, University of Cincinnati, Cincinnati, Ohio.

11:30 a.m. "Infectious Hepatitis."

Dr. Charles T. Stone, Professor of Medicine, University of Texas, Galveston, Texas.

1:30 p.m. "Recent Advances in Dermatologic Therapy."

Dr. George M. Lewis, Associate Professor of Medicine, Cornell University, New York, New York.

2:00 p.m. "Fluid and Electrolyte Requirements in Surgery."

Dr. Everett I. Evans, Professor of Surgery, Medical College of Virginia, Richmond, Virginia.

2:30 p.m. "The Diagnosis and Surgical Treatment of Patent Ductus Arteriosus."

Dr. Willis J. Potts, Chairman, Department of Surgery, Children's Memorial Hospital, Chicago, Illinois.

4:00 p.m. "Antibiotics in the Treatment of Diseases of the Ears, Nose and Throat."

Dr. A. C. Furstenberg, Chairman of the Department of Otolaryngology; Dean, Medical School, University of Michigan, Ann Arbor, Michigan.

4:30 — 5:30 p.m. Panel Discussion.
"Cardiology."

THURSDAY, MARCH 3

8:30 a.m. "Carcinoma of the Colon."

Dr. T. E. Jones, Surgeon, Cleveland Clinic Foundation Hospital, Cleveland, Ohio.

9:00 a.m. "Influence of Arteriosclerosis on the Central Nervous System."

Dr. Henry W. Woltman, Chairman, Sections on Neurology and Psychiatry, Mayo Clinic, Rochester, Minnesota.

9:30 a.m. "Roentgen Diagnosis of Carcinoma of the Lung."

Dr. Leo G. Rigler, Professor and Chief, Department of Roentgenology and Physical Therapy, University of Minnesota Medical School, Minneapolis, Minnesota.

11:00 a.m. "The Surgical Treatment of Urinary Retention."

Dr. John L. Emmett, Associate Professor of Urology, Mayo Foundation, Rochester, Minnesota.

11:30 a.m. "Coronary Thrombosis."

Dr. William D. Stroud, Professor of Cardiology, University of Pennsylvania Graduate School of Medicine and Associate in Medicine University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania.

1:30 p.m. "Chemotherapy in Surgery."

Dr. W. A. Altemeier, Assistant Professor of Surgery, University of Cincinnati, Cincinnati, Ohio.

2:00 p.m. "The Damaged Birth Canal and Its Repair."

Dr. Archibald D. Campbell, Associate Professor of Obstetrics and Gynaecology, McGill University; Gynaecologist-in-Chief, The Montreal General Hospital, Montreal, Quebec, Canada.

2:30 p.m. "Intracranial Aneurysms."

Dr. James L. Poppen, Neurosurgeon, Lahey Clinic, Boston, Massachusetts.

4:00 — 5:00 p.m. Panel Discussion.

"What's New in Medicine and Surgery."

FRIDAY, MARCH 4

8:30 a.m. "Thrombocytopenic Purpura."

Dr. Louis R. Limarzi, Assistant Professor of Medicine, University of Illinois, College of Medicine; Hematologist and Chief of the Hematology Clinic, Research and Educational Hospitals.

9:00 a.m. "Surgical Problems in Pediatrics."

Dr. Arthur A. Schaefer, Associate Clinical Professor of Surgery, Marquette University School of Medicine, Milwaukee, Wisconsin.

9:30 a.m. "Diagnosis and Treatment of Common Anaemias."

Dr. Ray Farquharson, Professor of Medicine,

11:00 a.m. "Surgery in the Aged."

University of Toronto, Toronto, Canada.

Dr. Barney Brooks, Professor of Surgery, Vanderbilt University, Nashville, Tennessee.

11:30 a.m. "The Diagnosis of Early Intestinal Cancer."

Dr. Harry M. Weber, Assistant Professor of Roentgenology, University of Minnesota Graduate School of Medicine, Mayo Foundation; Section on Radiology, Mayo Clinic, Rochester, Minnesota.

1:30 p.m. "Objectives in the Treatment of Diabetes Mellitus."

Dr. Robert W. Keeton, Professor and Head, Department of Medicine, University of Illinois College of Medicine, Chicago, Illinois.

2:00 p.m. "Fractures of the Hip."

Dr. J. J. Callahan, Associate Professor of Orthopedics, Loyola University School of Medicine, Chicago, Illinois.

2:30 p.m. "Diagnosis and Treatment of Early Pulmonary Tuberculosis."

Dr. Edmund F. Foley, Professor of Medicine, University of Illinois, College of Medicine, Chicago, Illinois.

3:00 — 3:30 p.m. Intermission for Review of Exhibits.

3:30 — 4:30 p.m. Panel Discussion.

Hematology

There is a \$5.00 registration fee.

**“YOUR MENTAL HOSPITALS” —
OVERCROWDING**

The Illinois Department of Public Welfare wishes to call to the attention of the medical profession the serious overcrowded conditions in its hospitals for the mentally ill as well as in the hospital for the mentally defective at Lincoln, and the hospital for epileptics and post-encephalitics and mentally defectives at Dixon.

In November 1948, based on standards of the Illinois Department of Public Health (75 square feet of bed space per adult patient and 60 square feet of bed space per patient under 16 years of age) there were over forty-three thousand patients in the state mental institutions in space adequate for twenty-eight thousand patients. This was an overcrowding of 15,800 patients, or an overcrowding of 56 per cent above the approved capacity. (See Table Below)

The nine mental hospitals are obliged by statute to accept mental patients committed by the court, regardless of available bed space. At the institutions for the mentally defective, at Lincoln State School and Colony and at the Dixon State Hospital, patients are placed on a waiting list pending admission. Over four hundred committed patients are on these two waiting lists.

The overcrowding has created a serious situation and is a dangerous fire and public health hazard. The beds in many of the wards are so crowded that the aisles are practically eliminated. The total patient population in the institutions has continued, for the past 18 years, to increase annually by 750 to 1,000 additional patients. The population continues to grow in spite of an intensive treatment program. Over a third of the patients are over sixty years of age, suffering from the changes of age, arteriosclerosis and senile dementia. The majority of these patients will spend the rest of their days in the hospitals.

Funds were allocated by the General Assembly of the Legislature in 1945 and 1947 for the construction of 2,350 additional new hospital beds. The Department is grateful for this aid, but these beds will be absorbed by the annual increase of total patient population. The overcrowding of 15,800 patients will not be relieved. It is hoped that the legislators in 1949 will further help relieve this critical condition.

The mental hospitals are charged with the care and treatment of patients with mental ailments. Physicians are requested not to send patients to the mental hospitals if they are only afflicted with physical ailments. Every effort should be made by physicians and psychi-

Hospitals	Certified Capacity*	Nov. 1948 Population	Overcrowding	
			Number	Percent
<hr/>				
State Mental Hospitals				
1. Alton	1,084	1,775	691	63.7
2. Anna	1,538	2,291	753	48.9
3. Chicago	2,757	4,947	2,190	79.4
4. East Moline	1,538	2,206	668	43.4
5. Elgin	3,347	5,655	2,308	68.9
6. Jacksonville	2,263	3,214	951	42.0
7. Kankakee	2,393	4,475	2,082	87.0
8. Manteno	5,031	7,324	2,293	45.5
9. Peoria	1,726	2,621	895	51.8
Total	21,677	34,508	12,831	59.1
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State Colonies				
1. Dixon	3,097	4,696	1,599	51.6
2. Lincoln	3,258	4,639	1,381	42.3
Total	6,355	9,335	2,980	56.8
Grand Total	28,032	43,843	15,811	56.4
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*Illinois Department of Public Health Standards				

atrists not to recommend institutional care for a patient if such patient can receive care outside of an institution on an out-patient basis. In all questionable cases, practising physicians may request through the Department of Public Welfare Psychiatric Clinics consultation and evaluation. The Superintendent of any State Hospital, or the General Office of the Illinois Department of Public Welfare in Springfield or Chicago may be contacted for information concerning the location of such clinics.

G. A. Wiltrakis, M.D.
Deputy Director

POSTGRADUATE COURSE IN DISEASES OF THE CHEST

The Council on Postgraduate Medical Education of the American College of Chest Physicians and the Laennec Society of Philadelphia announce a postgraduate Course in Diseases of the chest to be held at the Warwick Hotel, Philadelphia, Pennsylvania, February 28 through March 5, 1949. This course will emphasize the recent developments in all aspects of diagnosis and treatment of diseases of the chest.

The course is open to all physicians, although the number of registrants will be limited. Applications will be accepted in the order in which they are received. The tuition fee is \$50.00.

Application may be made through the Executive Offices of the American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois.

Murray Kornfeld
Executive Secretary

POSTGRADUATE COURSE ON DIABETES

The Frank E. Bunts Educational Institute and Cleveland Clinic will present a continuation course for physicians entirely devoted to the diagnosis and management of diabetes and its complications. The course will be held on March 17, 18, and 19. Drs. Henry T. Ricketts of Chicago, John S. L. Browne of Montreal, and H. L. C. Wilkerson of the United States Public Health Service will be the out-of-town guest speakers. Dr. E. Perry McCullagh is director of the course. In addition to the regular faculty

of the Institute several prominent Cleveland physicians will give lectures.

Inquiries regarding the complete program and registration can be addressed to the Director of Education, Frank E. Bunts Educational Institute, 2020 East Ninety-third Street, Cleveland 6, Ohio.

CANCEL BLOOD PLASMA SHIPMENTS

We have been informed by American Red Cross that effective December 31 1948 no further shipments of blood plasma can be made to us. Consequently on that date we will cease to distribute blood plasma to physicians and hospitals in Illinois.

Roland R. Cross, M. D., Director of Public Health.

AUTOPSIES IN MATERNAL DEATHS

Since January 1, 1948, there has been in effect a cooperative project by the State Department of Public Health and the Illinois State Medical Society for the thorough study of all deaths associated with gestation. The value of the study from the viewpoint of medical education and progress would be greatly enhanced by an increase in the performance of autopsies in these deaths. Our records show that of these cases so far investigated, only 30 per cent were autopsied. Of the 70 per cent which had no postmortem examination, 39 per cent died less than 24 hours after admission to the hospital. In a substantial number of these instances, an accurate diagnosis of the cause of death was not established. It is in these cases particularly that I urge your help in obtaining autopsies.

Your positive aid is also asked for the prompt performance of an autopsy in any case where permission has been obtained, but where the case, for one reason or another, has been referred to your office.

By giving your assistance in this matter, you will be rendering a distinct service to the advancement of medical knowledge, and therefore to the lowering of maternal mortality.

Roland R. Cross, M.D.
Director

Department of Public Health

OBSTETRIC CASES AND THE ILLINOIS RESEARCH HOSPITAL

An occasion may arise when an obstetric patient who develops a complication necessitating hospitalization cannot be admitted to the local hospital because of various reasons, such as shortage of bed space or lack of special facilities. Dr. F. H. Falls, Head of the Department of Obstetrics and Gynecology, University of Illinois College of Medicine has pointed out that under any circumstances where delay in admitting the patient to a hospital may seriously affect her welfare, she can be referred by the physician to the Illinois Research and Educational Hospital, Chicago, for diagnosis and treatment.

A physician desiring to make such referral should:

1. Assure himself that transportation of the patient can be arranged;
2. Write to Dr. F. H. Falls, 1853 West Polk Street, Chicago 12, giving details of the case;
3. When urgent, telephone to the hospital at any time of day or night — Monroe 6-3900, Chicago, ask for the senior resident on the obstetric and gynecologic service, and give him the necessary information.

Dr. Falls assures me that his department will gladly cooperate in the care of these patients insofar as the hospital resources permit.

Please submit this information to the profession.

Roland R. Cross, M.D.
Director

Department of Public Health

STUDY SMEAR TEST FOR DIAGNOSIS OF CANCER

Tumors of the digestive system cannot be diagnosed by the "smear test" alone in its present state of development, say four physicians from the departments of internal medicine and pathology, University Hospital, University of Michigan, Ann Arbor.

Writing in the January 8 issue of The Journal of the American Medical Association, H. Marvin Pollard, M.D., Henry C. Bryant, M.D., Malcolm Block, M.D., and Winston C. Hall, M.D., report on a study of the method of cell study developed by Dr. G. N. Papanicolaou of the Cornell University Medical College, New York.

"In the present state of development this diagnostic method should not provide the exclusive basis for either the positive diagnosis or the positive exclusion of gastric tumor," they say, adding:

"The method is valueless except in the hands of an experienced and specially trained pathologist."

The physicians examined the cell structure of stomach contents of 278 patients with symptoms of gastrointestinal disturbance. In 59 per cent of all tests reported as positive the findings were confirmed by clinical and "conventional tissue" study. Findings in 85 per cent of the tests reported as negative were confirmed by other studies.

STATE DEPARTMENT OF PUBLIC HEALTH



Human Diseases Involving Animal Reservoirs

In a recent article in the J.A.M.A. there were comments on the importance of the registration of diseases in animals and the advisability of establishing a registry of veterinary pathology. While such measures to improve knowledge of the incidence and distribution of diseases in animals would be of considerable economic value to animal industry and of scientific value to veterinary medicine, they would also have a significant bearing on the public health.

The propagation of certain of the diseases included in the List of Major Communicable Diseases in Man¹ is to some extent dependent on reservoirs in animals. Chief among the diseases involving animal reservoirs in Illinois are encephalitis, Salmonella infections, rabies, Rocky Mountain spotted fever, trichinosis, tuberculosis, tularemia, and undulant fever. Of these diseases, bovine tuberculosis, once a large problem in its transmission from cattle to human beings, is no longer of importance in Illinois because the thorough attack on the animal reservoir carried out in the 1920's, the continued meat inspections, and the extended use of pasteurized milk have been sufficient to prevent bovine tuberculosis in man. With regard to some of the other diseases listed above, partic-

ularly rabies, we are not in a similarly favorable position. Control of rabies has become a real challenge in several areas of this country and is not without disturbing potentialities in Illinois. This disease which affects domestic animals, foxes, and other wild life, is from the epidemiological and clinical points of view primarily a matter of attack on the organism in dogs.

In estimating the seriousness of this threat to public health, one needs to know the size of the dog population, the closeness of the dog-man relationship, the endemic incidence of the disease, and the factors which are likely to create an epidemic in the dog population. Estimates on the dog population are that there are about one-tenth as many dogs as people. Therefore, there would be 800,000 dogs in Illinois. In urban areas, the man-dog relationship is a close one, providing thereby increased opportunity for contact adequate to transfer the infection either through the saliva on the unbroken skin or by means of bites.

Over the past years, only one or two cases of rabies in man have been reported per year. This would lead one to consider that the subject is not worth writing about, but 13,246 dog and other animal bites were reported in 1947 in

Illinois, and about 4,000 Pasteur treatments were given. In 1948, a year of high polio incidence, there were almost as many dog heads submitted to the State Department of Public Health laboratories for examination for rabies as there were reported cases of polio. It goes without saying that the public interest in the two diseases is not comparable.

The aspects of the rabies problem that are arresting are the unknown size of the subhuman reservoir, the undetermined nature of the factors leading to an epizootic and the needless risks to which man subjects himself when a measure such as canine vaccination is at hand. In 1884, Pasteur showed that animals can be protected by the subcutaneous injection of spinal cord containing the virus which has been attenuated by serial passage and drying. With this simple and effective measure, man may protect not only his close friend, the dog, but himself as well. There is some evidence² to indicate that the rate of biting by dogs is influenced by the vaccination status of the animal, the unvaccinated group biting with a frequency more than 40 times that of the vaccinated.

From the data currently available, it is not possible to deduce the incidence of bites by rabid animals. In many cases the dog is not caught and in others it is killed immediately in retaliation or because the person wants to know without delay whether the head on examination will show the Negri bodies pathognomonic of rabies. Of the 2,144 heads sent to the State Department of Public Health laboratories during 1947 and 1948, 415 were found positive for rabies. This is 20 per cent of the specimens submitted. Since the presence of Negri bodies is dependent on full blown rabies in the animal, the Department laboratories subject the negative specimens to the mouse inoculation test. By this *in vivo* test an additional 10 per cent of the specimens prove to be infected with the rabies virus. The mouse test requires 21 days for the virus to manifest its lethal effects on the mouse, or for the test to be considered

negative. This delay in the laboratory analysis could be obviated if the original biting animal had not been destroyed but rather had been observed for the required period for signs of rabies. According to the rules and regulations for the control of communicable diseases in Illinois, a dog that remains well during the 14 day period of detention and examination is considered not rabid, and should vaccination of man (Pasteur treatment) have begun in the interval of observation on the dog, the treatment is discontinued. This plan of observation of the dog should be encouraged by all physicians who are called upon to treat dog bite because the Pasteur treatment, expensive and inconvenient as it is, carries a real risk to the patient in post-Pasteurian myelitis, and is therefore not to be undertaken without due cause.

In planning its attack on rabies in Illinois, the Health Department recognizes that the disease is primarily a disease of animals and is professionally a veterinary responsibility. A qualified public health veterinarian has this year been added to the staff of the Division of Communicable Diseases and a program is being developed in collaboration with interested lay and professional groups in order to inform the public of their responsibilities in reducing the incidence of rabies in dogs through mass vaccination, quarantine and control of stray animals. The recent experience in other states, particularly Maryland, Massachusetts, and New York, along these lines has produced very satisfactory mastery of this threat to human welfare. We believe that by special efforts the same accomplishment may be attained in Illinois through the inter-relationship of preventive medical principles in veterinary and human medicine.

REFERENCES

1. Illinois Department of Public Health Publication.
 2. Report of Subcommittee On Rabies, Committee On Animal Health, National Research Council, November 1945.
- Public Health in New York State, 1946: 67th Annual Report of the State Department of Health, page 50.
- Meyer, Karl F.: Animal Kingdom Reservoir of Human Disease. *Ann. Int. Med.* 29, pages 326-346, August 1948.

ORIGINAL ARTICLES



Reconstruction Surgery Of The Face And Neck

**W. A. McNichols, M.D.
Dixon**

The correction of conspicuous facial defects is no longer limited to actors and other professional persons who would hope to benefit financially. Cosmetic surgery is now available to and enjoyed by the average citizen for purely personal satisfaction. Doctor William Mayo said, "Every human being has the divine right to look human." This increasing interest of the general public in plastic surgery for aesthetic reasons is a most gratifying current trend.

An ever increasing percentage of the operations performed by the otolaryngologist is of a plastic nature. Not only is there an increase of the optional aesthetic procedure, there is also an increase in the amount of reconstructive surgery necessitated by accidents.

Despite the commendable work of industries, of unions, of insurance companies, and of traffic

regulators in reducing accidents, the accident rate in the United States continues to be appallingly high. Mechanical failure and the human element present hazards which cannot be legislated out of existence.

The Travelers Insurance Company reports that between Pearl Harbor and V.J. Day there were 651,911 military personnel wounded in combat. During the same time in civilian life 36,000,000 persons were injured. Agricultural accidents were second only to motor vehicle accidents.

Because of plasma, blood banks, penicillin, and antitoxin many badly injured persons, who previously would have died will survive. It is the attending physician's responsibility to see that they not be afflicted with any humiliating scars or deformities which can be avoided or repaired.

Presented before the 107th annual meeting, Illinois State Medical Society, Chicago, May 10-12, 1948.



Figures 1 and 2. A simple rhinoplasty changes this woman's appearance from pleasant to striking.

The restorative surgeon must be master of this situation. Common sense adjustment of the broken fragments and approximation of tissue which can be done early, easily, and without endangering the patient's life, will give for better results than extensive plastic procedure months later.

Too frequently the injured civilian is given excellent first aid and all fractures taken care of except those of the face. Often swelling will mask an injury which may result in a humiliating deformity. Should such an unfortunate person ultimately consult a plastic surgeon, the result is practically never as good as that which could have been obtained at the time of the accident. Injuries of the head and neck can be handled most capably by the otolaryngologist because of his knowledge of the anatomy of this region.

There are approximately five hundred otolaryngologists who belong to the American Otorhinologic Society for the Advancement of Plastic and Reconstruction Surgery. Widely distributed throughout America, they are available

to the general surgeons who are usually in charge in accident cases. These men are competent and cooperative. They are doing excellent work, but the need for more men with such training is great.

The vital nature of this reconstructive service was apparent during the recent war years. A. M. Brown¹ reports "When plastic operations were used to correct deformities resulting from trauma received in war, it was seen that a tremendous psychologic improvement accompanied cosmetic improvement and plastic surgery was adopted guardedly as legitimate surgery." Leech² writing of his evacuation hospital experiences, states that 7.1% of the cases were maxillofacial injuries. He observed that in no part of the body does early, careful, adequate first aid pay better dividends than it does in plastic maxillofacial surgery. He further states that such injuries should receive the benefit of definitive surgery at the most forward element possible.

RHINOPLASTY. Rhinoplasty comprises one-third to one-half of all plastic procedures. The



Figures 3 and 4. Traumatic saddle bridge corrected by ileum transplant.

methods of procedure are excellently described by Cottle³. The best results are obtained by those who make the careful preoperative analysis of each case as recommended by such eminent men as Fomon⁴, Brown⁵, and Straith⁶. This is obtained by having pre-operative pictures as well as prospective post-operative drawing in view at the time of operation. A large proportion of the surgeon's success depends on his assistant's keen observation, uninhibited criticism, and suggestions as to the amount of tissue to be removed or replaced. Other big factors in obtaining excellent results are the original shape of the nose, type and texture of skin, age and general health.

An individual with a conspicuous nose is very likely to be helped to a better adjustment and happier life with a nasal plastic operation. Usually when a deformity has been corrected then all other dimensions of the nose must be re-apportioned to insure a cosmetically pleasing result, which every patient has a right to expect. Frequently in correcting a deformity the physiological process of breathing is improved. The plastic surgeon does not try to sell the patient

or promise startling results. The initiative must come from the patient, then the physician must use his judgment as to whether or not the individual will be physically and mentally helped by such a procedure. An increasing number of people find relief and satisfaction in the operation undertaken for aesthetic reasons only.

EARS. Another source of mental torture is misshapen ears. The most frequent of these are enlarged and protruding. These can easily be corrected.

It is much more difficult to enlarge a small ear. It is a feat to build a whole new ear. This has to be done in several stages and takes a long time. A prosthetic ear is better looking but many people prefer a true ear, even if not so aesthetic. There is always the fear that prosthesis will drop off at some inopportune time. Each case must be appraised individually.

NASAL FRACTURES. Simple treatment is sufficient in the handling of simple fractures of the nose. The depressed bones are elevated and replaced with a blunt dissector, preferably under local anesthesia. The nasal vault is packed with gauze over catheters to provide air ways,



Figures 5 and 6. A depressed left frontal skull fracture made it necessary to use the right infra-orbital ridge as an anchor for an extension rod to keep the

depressed left infra-orbital ridge and left zygoma in place.

and the nose itself is protected by dental stent.

The complicated fractures, compound or comminuted, are handled in a different manner. All proportions of the original shape may be lost and have no supporting properties. These fragments must be molded back into shape and held into position by some mechanical device. Crawford and Blum⁷, with suggestions from Eric, have an excellent headband for immobilization of fractures of the upper jaw and nose and it is applied directly to the skull. Ulloa⁸ has a rhinotractor which has merit. I also like the Malinac⁹ device although there must be danger of pressure necrosis over the bony vault. For the last few years I have been using a Straith's headband, which is very versatile and when properly placed in plaster holds the comminuted fragments in perfect position, leaves room for the patient to breathe, and the pressure inside and outside the nose can be lessened several times daily without disturbing the fragments. I have found this apparatus very satisfactory. Any unsatisfactory results in the bony vault can be corrected later. The only ones that are very dif-

ficult to correct are where there is distortion of the alae. The bony vault can be widened or narrowed. The saddle nose can be corrected by bony implant from the crest of the Ileum. This has been the most satisfactory procedure in my hands. I have not had experience with the synthetic resins as described by Brown¹⁰. I have had unfortunate experiences years ago with ivory and cartilage and do not use these at all now.

FRACTURES OF SUPERIOR AND INFERIOR MAXILLA. For a simple depressed fracture of the Superior Maxilla, a Caldwell-luc opening is made in the antrum and a window opened into the inferior meatus of the nose. The depressed fragments are then elevated with urethral sound. These fragments are held in place with nu-gauze packed firmly in the antrum. If the infraorbital ridge is displaced, this is replaced and a Roger Anderson pin is placed in the fragment and this is held in place by a Straith splint. Much better results will be obtained in the simple depressed fracture of the antrum by nu-gauze packing than by placing a pin for extension in the cheek, as the latter causes an

unnecessary blemish. Pins and other methods of extension should not be placed in the middle of the cheek when it can be avoided as this produces extra scarring which, too, has to be removed. The zygomatic fractures are always reduced through the intraoral route. Even before the days of penicillin or sulfa, many zygomatic fractures were reduced by this route without infection. I have always made a large incision above the second molar and used a urethral dilator as an elevator to elevate the process. My finger is then inserted internally to determine whether or not my elevation is sufficient. If there had been a clean break, this was sufficient and then a rubber gutta percha was tightly packed under the process. This was sutured and held in place for four days. If the zygomatic process was shattered it was elevated intraorally and packed with rubber. Previous to the days of skeletal traction an incision was made, a hole drilled in the process, and an ordinary screen door screw inserted. This was held out with a rod buried in a plaster cap. Now a Roger Anderson pin and a Straith splint are used.

If the hard palate and alveolar process are involved, the oral surgeon and the otolaryngologist do an immediate repair, suturing the bony fragments of the hard palate together with cotton sutures. The remaining teeth may be wired together if thought advisable. By using the Straith mouth piece and some dental compound it is astounding how the oral surgeon will mold the hard palate and alveolar process into a perfect functioning process, both from an aesthetic and functional standpoint. These badly splintered hard palates and alveolar process fractures will heal if only brought into alignment and immobilized. These cases require the daily attention of the oral surgeon, not only from the standpoint of cleanliness, but also in order that any errors in correction at the time of initial immobilization may be adjusted. These changes can be accomplished much more easily with dental compound than with dental wiring.

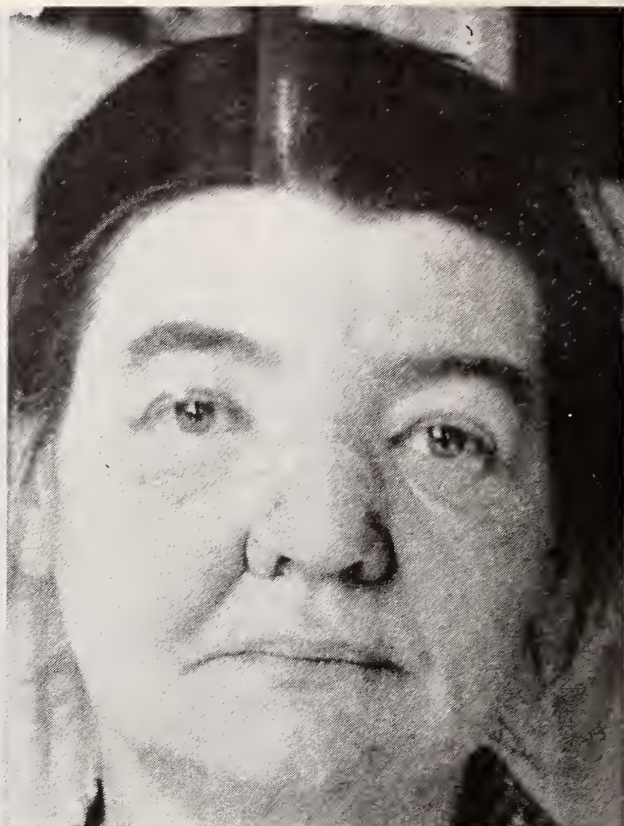
If the inferior mandible is fractured in one or more places these fractures are always immobilized first. The reason for such procedure is that the patients feel so much better when they can talk and when food can be utilized. All fractures of the mandible in which there is displacement or floating pieces are immobilized by external skeletal fixation. It was first thought that

skeletal fixation should be reserved for edentulous patients or fractures of the angle. It has been found that the condyles can be pinned, aligned and immobilized safely and easily and that all types of fractures of the mandible can be successfully immobilized with perfect control of all fragments and anatomical reposition. I have not had any complications of arthrosis of the temporomandibular joint. I believe this is due to the fact that by the assistance of the oral surgeon the patients have perfect occlusion. There is the advantage of immediate movement of the temporomandibular joint and cleanliness of the whole buccal cavity.

OSTEOMA. Osteoma is a rare bony tumor having growth independent of the tissue in which it exists. It occurs more frequently in the nasal accessory sinuses and its removal is sought more for its deforming effect than any other reason. Usually because of the denseness of the tumor it is necessary to destroy considerable bony structure which must be plastically repaired.

RHINOPHYMA. Rhinophyma is a lobular enlargement of the nose, with a dusty coloration, due to hypertrophy of all the structures, to congestion and to overproduction and retention of sebum. It is a variety of acne rosacea. It can be removed by merely slicing off the excess skin down to where it resembles a normal sized nose. The skin will then heal over and usually a perfect result is obtained. This is one marked deformity which patients are loathe to have corrected until they become very unsightly, yet are much pleased with the result and wish they had done it previously.

NECK. Every otolaryngologist has had thorough training on the anatomy of the neck and before the days of penicillin used this knowledge frequently. Now most of the infections of the neck clear up under chemotherapy and the days of surgical treatment of sinus thrombosis are over. However, every one of us should review the anatomy of the large vessels of the neck as such knowledge will be of great value to us when we least expect it. Due to high-speed transportation there are certain to be injuries to the great vessels of the neck when only prompt and courageous action will save the life of the patient. Also sooner or later it will be necessary to tie either the external or the internal carotid, or both, to stop hemorrhage from injudicious surgery, tumors, or even from plain epistaxis.



Figures 7 and 8. Rhinophyma.

In the neck we find, not frequently, thyroglossal cysts; commonly, branchiogenetics cysts, and excessive tissue. These can all be corrected along Langer's lines with very little scarring. Another rare but easily handled condition is torticollis.

FACIAL PARALYSIS, BURNS, LOSS OF TISSUE. Facial paralysis is improved by having something that helps support the facial tissues. Persons so afflicted get tremendous improvement mentally and physically when they can eat in public without saliva drooling from their mouths. I have used stainless steel wire loops to support these paralysed tissues. These can be placed under the skin under local anesthesia and the patient be discharged from the hospital in 12 to 24 hours. I whole heartedly agree that such a procedure as advocated by Schultz and Fowler¹¹ and others is better but such simple treatment as I have described is surely satisfactory and gratifying to the patient.

Burns and loss of tissue are the most difficult of all to repair and each presents an individual problem and must be treated as such.

CONCLUSIONS

There is an increasing interest on the part of the general public in plastic surgery for aesthetic reasons.

Reconstructive surgery necessitated by accidents will continue to be a considerable part of the practice of the otolaryngologist.

There is a large group of trained men, strategically situated, equipped to handle both deliberate and immediate reconstruction.

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Earlier Diagnosis of Carcinoma of the Breast

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More than twenty-five years ago the late Dean Lewis forcefully taught many of us that the essential finding necessary to a diagnosis of carcinoma of the breast was that of a lump in the breast. We must make the presumptive diagnosis on this one finding, and direct further study to ruling out benignity. Benign or malignant, the lump itself can be more safely observed in a jar on the laboratory shelf than in the patient's breast. None of us can tell which it is, without seeing it, feeling it, sectioning it.

However, we can all distinguish, in the breast, the nodule that may be cancer whether it is a solitary lump in an otherwise normal gland or a different lump in a breast the site of localized or diffuse benign disease. The general practitioner, the internist, the surgeon, whoever does general physical examinations, must feel every breast, must realize that early carcinoma does not reveal itself by the triad of text-book signs. When nipple retraction, pigskin breast, axillary nodes are present, it may often be found that curative operation is contraindicated by other findings; radical surgery would be too much — too late. To offer our patients high probability of five or ten year cure we must make the diagnosis while the tumor is limited to the gland itself and there is a fair chance of removing it and all its possible glandular extensions. All

too often on clearing the operative specimen, axillary glands with carcinoma are found which were not felt on clinical examination. Pre-seeding of the mediastinum or intercostal nodes may occur even without axillary deposits being found. This paper outlines the routine of examination used in the Breast Tumor Clinic of the Cook County Hospital.

Few of us will see the millenium in which every woman will have been taught to examine her breasts correctly during the monthly resting stage, will consult her physician immediately on finding an abnormality, and will submit to a surgical procedure necessary for certain diagnosis of what seems to her only a painless, simple lump in the breast. However, we all see more and more of these women who come for periodic check-up, because of fear of family predisposition, for recent or repeated pain in the breasts, or because, in incorrectly palpating their breasts, they have thought they felt lumps. We can examine the breasts of every woman upon whom we do a pelvic examination and of each whose family history reveals a death from carcinoma of the breast. Hence we have increasing access to those who have lowered family resistance to cancer, biologic inferiority of breast tissue, knowledge of previous difficulties with their breasts, chronic cystic mastitis, or whatever other etiologic predisposition to cancer of the breast exists. We must examine the breasts of each of these women with care. If nothing is found, we

From the Breast Tumor Clinic, Cook County Hospital and Loyola University College of Medicine, Chicago. Presented before the 107th annual meeting, Illinois State Medical Society, Chicago, May 10-12, 1948.

have an unexcelled opportunity to teach each the proper way to examine her own breasts; if we find a lump, we must consider it carcinoma until we have proven otherwise.

Each of the carcinomas of the breast which every year kill increasingly more than fifteen thousand women in the United States is at one stage of its growth a small lump involving only breast tissue. The skin slides smoothly over it, it is not fixed to pectoral muscles, local invasiveness has not yet shortened Cooper's ligaments; there may not even be the slightest dimpling of the skin on movement of the latter over the tumor. The tumor may be up to 3 or 4 centimeters in size, have long been present as a constant sized lump, or seem to have fluctuated in size with catamenia; the patient may only have noted it yesterday or known of it for months. There may be two similar or dissimilar lumps (more than two coincidentally developing carcinomas in one breast are rare). The tumor may be as soft as a tubular adenoma, as firm and extruded as a fibro-adenoma, as discrete as the latter, or as indefinite in outline as an area of fibro-cystic disease. Can you make a certain diagnosis of this carcinoma of the breast? No: and neither can anyone else. You are as expert as any: you can make a provisional diagnosis knowing that from fifty to seventy per cent of such lumps are malignant, and you have the optimum opportunity to influence the decisions of this patient for her own good. You must act so that she will accept the need for further study (operative biopsy), as at the same time she accepts the possibility of more radical surgery.

If she has already found a lump in her breast, it is probably fear which has kept her away from you for a varying period, and which has finally driven her to consult you. She is afraid of cancer, of operation, of pain, of mutilation, of death. Her unreasonable fears must be dispelled, normal apprehension for her eventual health channelled into willingness to proceed with the diagnosis. As you explain to her how you will determine whether this be a "harmless" or a "harmful" tumor, emphasis may be laid on the present curability of whichever may be found. She must be told that as she will be asleep to have the operative biopsy done, her previous permission must be secured for more extensive operation if necessary. Such a patient, given

no intimation from her doctor which she may interpret for the worse, will enter the hospital subconsciously convinced that she is to have only a minor operation on her breast. Such linking of provisional diagnosis and the means for arriving at an accurate anatomico-pathologic one is exercise of true surgical art.

The history should include family occurrence of breast abnormalities, of cancer (breast or other). The patient's menstrual, pregnancy and lactation history should be known. She should be questioned for factors in the endocrine and nutritional history which may have caused her breasts to be irregularly stimulated during their cyclic hyperplasia-involution; we should know in what phase of the menstrual cycle she now is. If there has been pain, one should ask where, when, and how much; if trauma, the exact site, time, visible bruising, continued pain are important to establish. The story of discharge from the nipple should include character, amount and times of appearance. The length of time she has known of tumor, association with pain, and observation of change in size during the menstrual cycle should be recorded.

The breasts are first inspected with the patient sitting. Changes in the skin of nipples, areolae, and gland are noted. The nipple is milked gently to see if there be discharge. Many women have asymmetric breasts with nipples not at the same level. The rhythm of nipple elevation when the arms are slowly raised above the head should be the same, however; one watches for the slightest dimpling of the overlying skin during this maneuver. The axillae are carefully palpated, insinuating the fingers deeply beneath the lateral margin of the pectoralis major, and between chest wall and subscapularis, as well as attempting to feel up into the apex of the axilla. The supra-clavicular spaces are felt. With the patient reclining, the entire breast is gently palpated against the chest wall, moving tumor and skin over it in every possible direction to elicit dimpling. The movability of the tumor with the pectorals strongly contracted is compared with that while they are relaxed, establishing the matter of fixation to the pectoral fascia. The sensations imparted to the flatly applied fingers and hand depend on the thickness and elasticity of the skin, the amount and density of the subcutaneous fat, the thickness of the gland, the position of the tumor

within it, the character of the contiguous breast tissue, the phase of the breast cycle and the degree of contraction of the pectoral muscles. We may finish this examination knowing nothing more than that there is a lump in the breast.

We do not often do trans-illumination, nor soft-parts x-ray studies of breasts, feeling that little more can be determined by these means than by careful inspection and palpation. We do not feel that punch or needle biopsy is defensible in early carcinoma if only from lack of cancer-cell asepsis. While we get strong positives in a high percentage of those patients with evident carcinoma by using the Bolen blood drop test, we also get some positives in benign growths. We have studied almost fifty patients with radioactive phosphorus, find elevated Geiger counts over all the malignant tumors, but do not feel justified in predicting benignity on the basis of an equal count over the two breasts. We have no personal experience with other biologic tests for cancer.

From this point, diagnosis and treatment are one. The patient is admitted to the hospital for the usual work-up, including chest plate, and if possible, films made of the skull, vertebrae, pelvis and upper ends of each humerus and femur. The operation is scheduled as a radical mastectomy. Under general anaesthesia a radial or transverse incision is made through the skin, reserving the use of the Warren incision for obviously benign tumors not in front of the gland, and in young women. Block excision, preferably in a radial direction, is made of the deep layer of the superficial fascia, the fat in front of the breast, the tumor and surrounding breast. The one who is to examine the tumor leaves the table, and the incision is closed.

The purpose now is to rule out benign tumor. The surgeon has examined the tumor through the skin, has seen its situation in and relation to the adjacent breast tissue, and now holds it in his hand to observe, slice and examine cut surfaces. Definite encapsulation and the tendency to be extruded from the gland speak for benignity.

There should be no pulled-in fat crowning the little mass. Next, a surface made by cutting through a benign tumor almost always bulges above the capsule edge, may be firm white, with whorls and spaces, yellow-tan with apparent lobulation, or one may see the smooth inside wall of a simple cyst. If all sections of the tumor are shotty small cysts and repeated slicings discover no other lesion, one may rather safely call it harmless. Decisions may be hard to make in some cases of proliferative hyperplasia, blunt-end acinosis, duct papilloma, or hemorrhagic cysts. Doubt may be resolved by having at hand a more experienced gross pathologist, and by examining frozen sections. Recent work by Francis Straus promises aid in gross pathologic diagnosis. He is working with dyes such as 2-3-5 triphenyl tetrazolium chloride, which selectively and rapidly stains malignant cells. At present, in vivo use of this dye is not feasible. The important thing is that one now has the tumor out, and is ready to proceed with radical resection as indicated.

It is not difficult to recognize most carcinomas. The difficulty of separation from adjacent tissue, the firm feel, the infiltrating union with breast tissue, and the peculiar grating sensation on cutting prepare one to find the shrinking, concave cut surface, the light yellow-gray streaking which speak for malignancy. Confusion of traumatic fat necrosis with carcinoma can be avoided by a knowledge of the history and by noting the characteristic greasy feel of the tumor surface.

If we cannot rule out benignity, we change the entire sterile set-up, gowns, gloves and instruments, and proceed with thorough radical mastectomy. The more difficult each breast carcinoma is to recognize as such at clinical examination, the earlier surgical biopsy is done, the higher will be the curability rates obtained by radical surgery for this external, palpable, curable cancer. Dean Lewis' statement is not an oversimplification; effective early diagnosis of carcinoma of the breast consists of suspecting every lump in the breast.

Viral Hepatitis

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Although viral hepatitis has been known and described for over one hundred years, it is only recently that its true nature and importance have been recognized. Following the suggestion of Virchow in 1865¹, the jaundice was thought to be the result of a catarrhal obstruction of the common duct. The presence of inflammatory changes in the liver was not appreciated. As a consequence of this misconception, the disease was assumed to be essentially benign. In fact, fatal and near fatal cases were called acute and subacute yellow atrophy of the liver and were not recognized as the same disease.

During the last few years it has become necessary to radically alter this concept of viral hepatitis. It is now definitely established that the primary pathological lesion involves the parenchymal liver cells and that common duct catarrh is rarely present at all². Furthermore, the disease can no longer be considered benign. Not only is there a significant mortality rate, but various types of sequelae frequently develop.

In spite of these facts there is still a lack of appreciation among the profession at large of the importance and seriousness of hepatitis and consequent failure to institute proper treatment. We are, therefore, taking this opportunity of presenting the evidence.

DEFINITIONS AND ETIOLOGY

The production of the disease in human volunteers has definitely established the etiologic agent as a filterable virus³. The term viral hepatitis is employed as an inclusive term, because there appear to be two separate but similar viruses or perhaps two strains of the same virus called respectively the homologous serum, plasma or transfusion hepatitis type, and the infectious or epidemic hepatitis or catarrhal jaundice type. Pathologically these con-

ditions are indistinguishable and clinically the differences are minor. The distinction is based primarily on a lack of cross immunity, variations in length of incubation period and variations in the mode of transmission.

INCIDENCE

The exact incidence of the disease is not known, but the evidence indicates that sooner or later a significant proportion of the population becomes infected⁴. During the war over 170,000 cases were diagnosed in the United States Army alone. It is generally stated that 5% of the adults give a past history of viral hepatitis. Since subicteric cases are rarely recognized and are probably considerably more numerous than those with jaundice, it is obvious that the overall incidence is a significant figure. In fact, it now appears that viral hepatitis constitutes a major public health problem.

EPIDEMIOLOGY

Transmission of homologous serum hepatitis apparently occurs solely as the result of parenteral introduction of infected human blood or blood products. On the other hand, infectious hepatitis is not only produced in this way, but also by the oral ingestion of fecally contaminated material. Thus both strains of the virus are present in the blood stream for a period of several weeks before and after the appearance of jaundice. In addition, the virus of infectious hepatitis is found in the feces. The incubation period of homologous serum hepatitis ranges from seventy to one hundred thirty days, whereas that of infectious hepatitis varies from sixteen to forty-five days.

From the point of view of the practicing physician, parenteral transmission is of the greatest importance not only because it is fundamentally his responsibility, but because it is largely avoidable.

Available evidence indicates that a significant percentage of the civilian population carry the virus in their blood stream. In Baltimore this figure has been estimated as 5% or more⁴. Apparently these individuals are relatively

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Presented before the 107th annual meeting of the Illinois State Medical Society, Chicago, May 10-12, 1948.

asymptomatic, and except for the occasional case of acute hepatitis, they cannot be detected with present methods. Thus the danger of producing the disease from whole blood transfusion is real and directly proportional to the number of transfusions. As in the case of many other therapeutic procedures, the risk must be balanced against the gain.

In the case of pooled plasma or serum, however, the risk is greatly increased, as only one infected donor is necessary to infect the entire pool. Although recently published figures show an incidence of only 4.5% of hepatitis among recipients⁵, previous evidence collected by ourselves concerning the accuracy of such data in this disease suggests that this figure is much too low⁴. For example, one lot number of yellow fever vaccine to which pooled human serum had been added was reported to have produced hepatitis in only 0.03 percent of recipients. Actual examination of an unselected sample revealed an incidence of at least 22%, most of the cases were mild with little or no jaundice and so had not been recognized. In our opinion neither pooled plasma nor serum should be used; except in extreme emergencies where whole blood is not available or in severe burns where it is to some extent specific. In addition, donors should not be used with a past history of jaundice or with a recent acute illness. Finally, the recent work of Levinson et al⁶ should be mentioned. These workers have devised a method of sterilizing plasma and serum by means of ultraviolet light which apparently kills the virus. Clear cut evidence of its effectiveness has recently been obtained.

Unfortunately, it appears that the administration of whole blood, plasma and serum is only one of the ways in which this virus is transmitted. Since only 1/100 cc. of infected plasma is necessary to produce the disease, the virus can be readily carried from one individual to another through improper syringe and needle technique⁴. Due to the fact that the virus is unusually hardy and relatively resistant to heat, sterilization must be accomplished by boiling for at least ten minutes or by autoclaving. Any form of subcutaneous, intramuscular, or intravenous medication, if sterilization is inadequate, may produce infection. In addition, it has recently been shown that the use of unsterilized syringes for the withdrawal of venous blood is

dangerous. This is due to a brief period of negative venous pressure when the tourniquet is removed, which causes the regurgitation of a small amount of the blood from the syringe back into the vein. Cases have also been produced by the use of a large syringe carrying multiple doses of such substances as vaccines, penicillin, or bismuth which are used for a number of patients with only a change of needles. The usual procedure of withdrawing a plunger to ascertain if the needle is in a vein often results in aspiration of a small amount of serum. If this serum contains the virus, the remaining material in the syringe is infected. Finally, there is evidence that the disease is transmitted by needles and lancets used to puncture the finger for blood counts. Such instruments are generally sterilized by placing them in alcohol for a short time. It is possible that this is one of the major sources of the disease. Examples of the foregoing modes of transmission have all been actually observed and are obviously preventable. Autoclaving or ten minutes boiling of equipment is recommended. Finger puncture should be performed with individually sterilized needles or knife blades.

As previously pointed out, infectious hepatitis is not only transmitted parenterally, but also by the fecal-oral route. Polluted water probably plays an important role, partially because the concentrations of chlorine usually employed to purify drinking water are inadequate to kill the virus. Thus it is possible that the drinking water of many of our communities is the source of the disease. Swimming pools, food handlers, and in some instances, direct personal contact are other responsible mechanisms.

PATHOLOGY

Extensive biopsy and autopsy studies have conclusively demonstrated that the primary pathological lesion in viral hepatitis involves the parenchymal liver cells². Catarrh of the common duct with obstruction due to edema or a mucus plug, rarely, if ever, occurs. The jaundice is due to a disturbance in the excretion of bilirubin.

Actual damage or necrosis of the liver cells occurs, proportional in extent to the severity of the disease. In severe cases almost no cells may remain. Inflammatory exudates, particularly in the portal areas, are also seen. Histo-

logically, lesions are present for a period of a week or more prior to the appearance of jaundice. Complete recovery does not occur for at least two months and often considerably longer.

CLINICAL PICTURE

Pre-icteric Stage.—The clinical picture of acute hepatitis with jaundice has been previously discussed in detail⁷ and is now too well known to require extensive description here. Certain features of importance, however, are not generally recognized. In both types of the disease, there is usually a symptomatic period, varying in length from a few days to two weeks, preceding the appearance of jaundice.

In homologous serum hepatitis the onset is insidious, practically afebrile and is characterized by lassitude, headache, a few loose stools, anorexia and increased flatus. In approximately 20%, urticaria, arthralgia, and a vesicular eruption, particularly of the palms is seen. The latter findings are significant when present.

The onset of infectious hepatitis, on the other hand, is abrupt and febrile. The temperature may reach 104 degrees, although shaking chills are rare. After a period of two or three days, the fever subsides, and the picture is similar to that seen in the homologous serum form. The importance in recognizing this pre-icteric period lies in the fact that during this time the liver injury is acute and progressive, and the liver is unusually sensitive to additional trauma. Thus, surgery performed in this period, even though minor in nature, may produce a fatal outcome. Furthermore, adequate treatment in this stage is most effective in decreasing the severity of the subsequent illness and shortening the course of the disease.

During the pre-icteric period the size of the liver tends to increase and, in some instances, rather severe abdominal pain may be produced. This pain may be so severe that a rupture of a viscus is suspected, and the abdomen in the right upper quadrant may be not only exquisitely tender, but also rigid. The presence of an enlarged liver is a key to the diagnosis.

Acute Stage with Jaundice.—It is important to realize that the prognosis can never be accurately determined at the time of onset of jaundice. In consequence, all cases must be treated as though potentially severe. Persistent vomiting and a rising icterus index over a period of a

week or more are serious signs. Mental confusion generally precedes coma and death. Purpura is occasionally seen and, in some cases, involves the central nervous system. Although this is the result of a deficiency in prothrombin, it may not be all due to a disturbed liver metabolism, but may also be due to a lack of vitamin K. The prognostic significance of purpura is dependent on our ability to distinguish between these two factors by observing the response to vitamin K.

Acute Hepatitis without Jaundice.—The importance of this form of the disease lies in the fact that lack of recognition and consequent lack of proper treatment may allow a primarily mild case to develop serious residuals. The clinical course of acute hepatitis without jaundice, as well as the laboratory findings, are qualitatively identical in all respects with those of the icteric form.

The incidence of the non-icteric form in any group of cases is, of course, dependent on factors of virulency and host resistance, as well as the clinical accumen of the physician. The incidence has varied from 30% to 95% of the total cases in a given epidemic. In the largest groups there usually have been about three cases without jaundice for every one with jaundice.

Convalescent Stage.—The most important feature of the convalescent stage is its duration. Active hepatitis persists for sometime after the disappearance of jaundice. Patients who remain in bed may be practically asymptomatic and without abnormal physical findings, and yet, when allowed to become ambulatory, the liver again becomes enlarged and tender and symptoms recur. This reaction may require up to two weeks to become manifested. Thus apparent recovery while on bed rest is deceptive.

We have had an opportunity to investigate this phenomenon on a very large number of patients, and the criteria for recovery which have been evolved will be discussed under treatment.

Chronic Hepatitis and Residuals.—Although the majority of patients make a satisfactory clinical recovery in a period of two months after onset of symptoms, approximately 10% continue to have evidence of active liver disease⁸. Of this group about one third are still sick after one year.

In chronic hepatitis, the term which we arbitrarily use in cases of more than three months duration, there are periods of exacerbation, followed by periods of remission. The most important symptom is lassitude and fatigue. Complete loss of initiative, headaches, loose stools, and increased flatus are usually present. Patients may complain of a dull ache in the right upper quadrant or lumbar region. The liver is large and tender. Exacerbations are frequently produced and precipitated by physical exertion, although excessive alcohol and secondary infections may do likewise. Evidence of liver damage is obtained from the laboratory but may not be marked. Cirrhotic changes may develop in an unknown number.

In addition to chronic hepatitis there are many individuals who have permanent alterations in their liver function. Many of these cases are asymptomatic. It is probable that such changes usually are not progressive. The danger lies in subsequent exposure to liver trauma, which in the face of a diminished functional reserve may result in liver failure.

Physical Findings.—The physical findings in connection with the liver, although few in number, are of considerable importance. Liver size should be determined not only by palpation, but also by percussion. A palpable liver is, of course, not necessarily an enlarged liver. The upper border must always be determined. A flat x-ray plate of the liver for size is often helpful, although it is not of value in border line cases. The detection of liver tenderness is most important. Direct fist percussion over the liver anteriorly is helpful in this regard. Percussion over the left chest should be used as a control. Liver pain is characterized by a short latent period of a few seconds, the pain then builds up to a maximum in the course of another five or ten seconds. An ache may last from a few minutes to twenty-four hours. Finally, liver tenderness is associated with a small localized tender spot in the right costo-vertebral angle in about 50% of the cases. Although this is not pathognomonic of liver tenderness, it is a most valuable sign.

LABORATORY FINDINGS

It is impossible to give more than a brief discussion here of the laboratory findings in viral hepatitis. From a practical point of view, it is best to use a minimum number of pro-

cedures to be certain that these are properly performed and understood. Unfortunately, the choice of test depends upon the stage of the disease, and the purpose for which they are made. Thus some procedures are best used as diagnostic aids, whereas others have prognostic importance.

The Pre-icteric Stage.—The finding of bile in the urine is of the greatest value. For this purpose it is best to use either the methylene blue test⁷ or Watson's strip test⁹. Bilirubinemia is best determined by Watson's modification of the Van den Bergh procedure¹⁰. This requires a photometer. If such is not available, the acetone modification of the icterus index is to be preferred to the usual methods¹¹. In the early diagnosis either the thymol turbidity¹² or the cephalin cholesterol flocculation¹³ is useful. The presence of leukopenia with a small percentage of immature atypical lymphocytes is often helpful. During the acute stage of jaundice, it is only necessary to follow the level of the serum bilirubin. A guarded prognosis is indicated by a fall in the proportion of the non-protein nitrogen as represented by urea and a decrease in the prothrombin concentration to 50% below normal which fails to respond to the parenteral administration of vitamin K.

In convalescent acute hepatitis and in chronic hepatitis the bromsulfalein retention is of the greatest value. This should be performed, using a five milligram per kilogram dose, drawing samples 45 and 60 minutes after injection of the dye. Three percent or more of the dye in an hour or five percent or more in 45 minutes are definitely significant. Finally, the simple quantitative urine urobilinogen method of Watson should be mentioned¹⁴. This can actually be done in the office and provides a simple sensitive liver function test.

DIAGNOSIS

The diagnosis of viral hepatitis in the pre-icteric stage is usually presumptive and is based on evidence of disturbed liver function¹⁵. Especially if an enlarged, tender liver is present the patient should be put on a hepatitis regime and further developments awaited.

The development of jaundice or of bilirubinemia or bilirubinuria establishes the diagnosis. Hemolytic jaundice is rather easily ruled out because of the absence of bilirubinuria in this condition. Extra-hepatic obstruction may pro-

duce a confusing picture. The presence of colicky pain, persistent acholic stools, negative turbidity or flocculation tests and absence of a characteristic prodromal period are all in favor of this latter diagnosis. Other forms of parenchymal hepatitis must always be considered. Infectious mononucleosis, acute brucellosis, virus pneumonia with hepatitis, and malaria may be associated with a similar clinical picture.

TREATMENT

Treatment of viral hepatitis is based on three cardinal principles; namely, rest, diet, and avoidance of additional liver trauma¹⁶. We have shown in a large series of cases that such treatment is effective in decreasing the severity of illness, shortening the duration of the disease, and decreasing the incidence of residuals.

Of these, rest is by far the most important. It must be instituted as early as possible; it must be reasonable strict; and it must be maintained until recovery is reasonably complete. Lavatory privileges may be allowed in mild cases, but in others bed rest should be complete.

The dietary treatment is still a matter of dispute. At present it is generally agreed that an adequate protein and carbohydrate intake is important. In an average case, protein should be maintained at 150 grams daily and carbohydrates at about 300 grams. In the light of present knowledge, it is probably best to restrict the fat intake to approximately 70 grams. This should consist chiefly of butter fat and should be adequate to make the diet palatable. Only when oral intake is inadequate is intravenous feeding necessary. If nausea and vomiting is persistent for more than a few days, amino acids and glucose can be given intravenously. A fluid intake of 3000 to 4000 cc. daily is of great symptomatic value. If this cannot be met by mouth, fluid should be given intravenously. Most important, however, is to limit the salt intake, since the patient with acute liver damage tends to retain fluid and will readily develop edema and even ascites, or pleural effusions. There is no evidence that large doses of vitamins or substances such as methionine, or choline are of value in acute hepatitis. In view of Shapiro's work, indicating possible toxic effects from large doses of parenteral vitamin K¹⁷, it is best not to give more than five milligrams per day.

Finally, it is important to avoid all medications or measures which may throw further strain on the liver. The sulfonamides should be avoided and penicillin employed in case infections arise. The effect of sedatives in the presence of liver disease is often enhanced, but it is not known whether they injure the liver. In general, however, they should be avoided. This applies particularly to chloral, opiates, and short acting barbiturates. Since diarrhea has a specific deleterious effect in these cases, laxatives should be avoided. Enemas should be used for constipation. Surgery of all sorts is contra-indicated, except in instances of extreme emergency. Under such circumstances local anesthetic is the best.

The criteria which we have found most reliable in determining the time patients should be allowed out of bed is as follows:

1. At least three weeks of bed rest.
2. Liver normal size on examination or only slightly enlarged; must not be tender.
3. Absence of symptoms, especially anorexia and lassitude.
4. Bromsulfalein retention of less than 5% in one hour. If the patient is over forty years of age, or has had a particularly severe case of hepatitis, one or more additional weeks of bed rest is indicated.

PROGNOSIS

The mortality rate of acute viral hepatitis averages 0.3 of one percent. However, this figure is somewhat deceiving, because mortality in many special groups has been much higher. In one series reported by Snell¹⁸ of thirty-two cases, the mortality rate was 20%.

The incidence of residuals has already been discussed.

SUMMARY

A review of the current status of viral hepatitis has been presented. Transmission of the disease through blood and blood products and especially by means of syringes, needles and capillary puncture is emphasized. It is pointed out that such transmission is largely preventable and is the responsibility of the medical profession.

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The General Practitioner and the Treatment of Crossed Eyes

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Those of you who examined draftees during both world wars will recall the large number of candidates who had very poor vision in one eye. This was more true during World War I, for many more parents have had better advice and more pediatricians were available by 1941 than in 1917. The physician who examines applicants in industry knows how often a prospective employee is rejected because of poor vision in one eye. You may ask, why all this commotion? A man with one eye can do everything anyone else can. That is true, if nothing happens to his good eye. We ophthalmologists know how often an accident occurs to such a patient and strikes the good eye. When diabetic retinitis or cataract occurs in such a patient, it most frequently happens to the better eye or if seen in both eyes, oc-

curs first in the better eye. During the past 2 years, I have seen 4 cases of retinal detachments in the good eye of patients whose other eye was amblyopic.

These are reasons enough to devote attention to the question of preventing amblyopia.

It is a very common experience of every ophthalmologist during the course of a routine examination to discover an amblyopia exanopsia, with or without a squint.

This is a condition in which no pathology can be found, yet the vision is poor, often as little as perception of hand motion. It is due to the failure of the patient to develop the visual pathways between the retina and the visual cortex, or to cease using a partially developed one at an early age. It occurs most often when there is a marked difference in the refractive error of the two eyes

**Presented before the Illinois State Medical Society,
General Session, May 12, 1948, Chicago**

or the deviation from the normal visual axes of one eye. Both may occur together.

We do not see with the eye, we must learn to see. To see perfectly, the image must fall on the fovea, the center of the macular area of the retina. If the image falls elsewhere, we have much less than normal vision. The pathway between the fovea and the occipital cortex must be in use very early and may be fully developed by the fourth or fifth year. Anything which prevents the use of this pathway, stops the development of the visual education of the eye in the state at the time of the interruption. If it occurs at birth, and nothing is done, the eye may have little more than light perception. If it occurs after 2 years of age, the vision would be considerably better. The older the patient is at the time of the interruption, the better the vision will be.

The most common cause of the interruption of the perfect use of the visual pathway is a squint. This is a deviation of one eye from the normal axis. The deviation may be, in, out, up or down, but since the most common deviation is in, and this condition is commonly referred to as crossed eyes we have chosen this term for the title of this paper and will talk chiefly of crossed eyes. What we have to say about crossed eyes, applies equally well to eyes that turn out, up, or down.

When, from whatever cause one eye deviates from the normal visual axes, the patient sees double. When the deviation is slight, the images are close together and this is very annoying. In adults, not only does it cause diplopia and blurring, but frequently headaches, nausea and even emesis. These symptoms are infrequent in young children. Blurring and diplopia seem to be the most distressing feature and the child frequently rubs one eye with his fist. He is trying to rub out the second image. He very soon learns to disregard this second image and ceases to use the eye for central vision. From that time on, he is "one eyed". The other eye will have good vision, but the squinting eye may even lose some of its visual acuity. If the squint develops after the child has as much as 50% vision, and then is reduced to, say 30% or less, this can be again brought back to 50% or improved by treatment. However, if it occurs before the age of one year, and nothing is done, the vision can never be improved a great deal.

Our first concern therefore in the care of a patient with a crossed eye is to see that he uses his eyes, to prevent an amblyopia exanopsia.

What we have said thus far concerns only the central vision of each eye. For perfect vision, the patient must have stereopsis or depth perception which requires the perfect use of the eyes together. Even when the vision of each eye is normal, and one eye deviates from the normal visual axis, the patient uses one eye at a time and has very poor depth perception. Stereopsis must be developed before the age of seven years. If the eyes *have not been parallel before* the age of seven, nothing done after that time will give that patient normal depth perception. Anything done after that time, is only for cosmetic reasons. A patient whose eyes did not cross until the age of four or five years may with proper training exercises have the stereopsis restored when he is older, because he had learned depth perception before the squint developed.

The treatment to secure stereopsis is, therefore, get the eyes parallel by whatever means necessary as early as possible.

It is not within the province of this paper to discuss refraction, the prescribing of glasses, the use of drops, or the surgical treatment of the squint.

We have purposely omitted discussing paralytic squint as the treatment is chiefly surgical.

We will confine ourselves with what you as general practitioners, internists and pediatricians should do for cases of squint. Your chief role is, of course, to give advice. In order to give intelligent advice there are a few very pertinent facts to be remembered.

First, no child is too young to wear glasses if they are needed. We have ordered glasses for a babe of 7 months. In this case, the eyes were parallel and the glasses discarded at 4 years of age.

No child is too young to start treatment for a squint. If the eyes are crossed after 3 months, treatment should be started.

If a child holds his head toward one shoulder (and has no wry neck) he has a vertical diplopia and is attempting to bring the images together.

If a child rubs one eye frequently, he may have an intermittent squint, present only when

he is tired or ill, at which time the eye may be crossed.

About one half of all squint cases can be corrected by treatment or glasses or both. The other 50% will probably require surgery for correction.

Surgery should not be restored to before 4 years except in cases of paralytic squint. If operated on too early, the eye may turn out at a later date.

The ideal time for surgery is about 4½ years. That gives the patient 2 to 2½ years to learn stereopsis.

If the eyes are parallel with glasses, surgery can be deferred indefinitely for the patient can have normal central vision and stereopsis.

Surgery never improves vision.

Surgery done after the age of seven is for cosmetic reasons only.

If the first surgical procedure is insufficient, it can be repeated with good results. Eyes previously operated on, which turn out, can be again operated on with good results at any age.

We believe that all children with crossed eyes, not made parallel with glasses, should be operated on before they start to school. The danger of developing an inferiority complex from the taunts of schoolmates is a very real one and can alter the course of a child's life and his whole future.

Many of our colleagues were likely to tell the parents of a cross eyed child — "forget about it. He will outgrow it". This did occasionally happen. But too often, even when the eyes were straight, he had very poor vision. Very rarely, the eyes become parallel and with good vision.

Other old-time practitioners told parents "wait until the child is 15 years old and have him operated on". This was poor advice because, almost without exception, the crossed eye was amblyopic and the operation at best secured only a cosmetic result.

Even some eye doctors advise waiting for surgery until the patient is old enough to be operated on under local anaesthetic. In such instances it is too late to hope for stereopsis.

We are unalterably opposed to operating on young children under local anaesthesia. The psychic trauma is too great.

Thirty years ago there were probably fewer than 10 eye doctors in Illinois south of Springfield. Today there are well trained ophthalmolo-

gists all over the state. You will, of course, direct your patients to them for expert care.

There will be times and circumstances when it will be impossible to do this. If such instances arise, you may have to treat an occasional squint case. If so, we advise the following routine.

If the history and your observation indicates that the eyes turn alternately (that is, when the child fixes your finger or light with the right eye, the left turns in, or, conversely, fixing with the left eye, the right eye turns in) he probably has an alternating squint. In such cases, the vision in the two eyes is equal and nothing need be done. If you are uncertain or prefer to take no chances, use atropine sulphate 1% B.i.d. in one eye for 10 days, wait 10 days and then use it in the other eye for 10 days. This routine may be repeated several times. Complete occlusion may be used instead of the atropine.

If one eye is crossed, and it is always the same eye, the opposite or good eye must be occluded. To be really effective, this must be complete. If the child peeps over or around the occluder, no results can be expected. A gauze or any material through which the patient cannot see should be fixed firmly to the skin with adhesive all around the eye and removed and a clean one applied immediately every few days. This may remain 2 or 3 weeks. If, when the bandage is removed, the crossed eye is straight and the opposite or good eye appears crossed, there is no cause for alarm. If this condition persists for a week, cover the originally good eye for a week, no occlusion for a week and alternate. Continue this procedure until the eyes fix alternately. If the eyes cannot be made parallel, we would prefer to have them to squint alternately as this usually this procedure of occlusion alone, you will prevent an amblyopia and give your patient a useful means the vision in the two eyes are equal. By eye.

No child out of pure "cussedness", will continue to pull off the occluder. If he pulls this off, it usually means that the open (crossed eye) has poorer vision than the good or occluded eye and he wants to see better. The more he fights against the occluder, the more urgent is the need for it. The fight against occlusion means that the crossed eye has poor vision. If no other means succeeds in keeping the occluder on, we have found that the best procedure is the use of a

cylindrical card board mailing tube available at any stationery store. This should have a diameter wide enough to slip over the hand, and long enough to prevent bending the elbow. It should be pinned or tied to the sleeve above the elbow and the child taught that the moment the occluder is pulled off the splints will be placed on both arms.

This period of training is usually quite short, for the child learns quickly to leave the occluder alone. In the case of older children, over 5 years, it is much more difficult.

The chief resistance to this procedure comes from the mother. She must be co-operative and bear the burden of the struggle. When she gives up — we can expect very little improvement in vision for the only alternative is to use atropine sulphate 1% solution in the good eye and in our experience, very little vision develops with this procedure alone.

In conclusion, may we hope that this presentation will in some measure prevent some child from developing an amblyopia exanopsia.

Electro Shock Therapy in Patients with Severe Organic Disease

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Chicago**

Electro shock therapy, like other treatments in their incipient stage of development, was first limited in its application with the list of contraindications legion. With accumulated experience, its application became more widespread and the contraindications to its use, fewer.

Meduna¹ offered the following absolute contraindications to the use of metrazol: Organic cardiovascular disease, febrile illness, pregnancy, active tuberculosis and abnormal laboratory findings in the blood and urine. Other authors added old age, goiter, seropositive syphilis and debilitated states.

Recent reports in the literature contradict the limitations to treatment formerly placed on patients with psychiatric conditions where shock therapy is indicated. Age is definitely no reason to exclude patients from the benefit of treatment. Evans² reported a group of elderly patients treated without untoward results; many of them

had physical abnormalities coincident with old age. Mayer-Gross³ in 1945 reported excellent results without sequelae or complications in a series of patients all over 60 years of age.

Pregnancy was long thought to be a definite contraindication to convulsive therapy. Goldstein and co-workers⁴ reported a case of psychosis with pregnancy, successfully treated with convulsive therapy. More recently, Polatin and Hoch⁵ reported a series of similar cases with no untoward results.

In our experience, cardio-vascular disease was found to be no cause for rejecting patients for electro-shock therapy when it was psychiatrically indicated. In many cases where psychotic agitation produced more strain, as in a pre-existing heart disease, electro-shock therapy is specifically indicated. Electrocardiograms that were taken at the time of admission to the sanitarium and compared with cardiograms after treatment was started, often revealed improvement in the tracings. Many cases of hypertension in agitated psychotics revealed lowering of blood pressures after psychotic symptoms abated with electro-

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shock therapy. It has been the general experience of most workers that cases with myocardial disease can be treated without danger to the physical well being of the patient. Kennedy and Wiesel⁶ demonstrated a decrease in blood pressure and even disappearance of retinal hemorrhages in a psychotic patient with hypertension, after electro-shock therapy. Myerson⁷ treated successfully, a patient whose condition made it imperative, despite repeated anginal attacks.

In our series of cardiovascular cases, the cardiologist consistently advised against electro-shock therapy because of the severe degree of cardiac pathology. Nevertheless, convulsive therapy was given without untoward results. We found that the decision for giving electro-shock therapy should not be made by a cardiologist who is unfamiliar with the effects of convulsive therapy. The seriousness of the mental disorder and physical condition must be carefully evaluated and only few pre-existing physical conditions constitute contraindications to shock therapy where it is psychiatrically indicated.

In this report we present the results of electro-shock therapy in more than 2,000 patients, 280 of whom had organic disease of such nature as to contraindicate therapy on the basis of preexisting standards. The following is a tabulation of some of the physical disorders which co-existed with mental symptoms in patients treated with electro-shock therapy.

Mental illness incident to old age with associated debilitation	—33
Post-surgical	— 6
Obstetrical	— 2
Pulmonary pathology, e.g.	
Bronchitis	— 6
Asthma	— 2
Bronchiectasis	— 1
Organic Brain Disease, e.g.	
General Paresis	— 4
Parkinsonism	
Postencephalitic	— 1
Vascular	— 3
Huntingtons Chorea	— 1
Metabolic disorders, e.g.	
Toxic goitre	— 7
Diabetes Mellitus	—32
Pernicious Anemia	— 1

Skeletal disorders, e.g.	
Deforming arthritides	—11
Fractures of extremities	— 3
Cardiovascular disorders, e.g.	
Severe hypertension	—23
Severe myocardial damage	—74
Cardiac enlargement	—11
Old coronary occlusion	—18
Disturbances of conduction, e.g.	—40
Bundle branch block	
Extrasystolic arrhythmia	
Auricular fibrillation	
Peripheral phlebitis	

Because many therapists were reluctant to employ shock therapy in the presence of severe organic disease, safer methods of application were sought. Magnesium sulphate intravenously and curare were suggested and used by some, but not without additional danger.

It is generally accepted that the convulsive seizure in epileptics rarely aggravates other existing disease, and that the epileptiform seizure cannot be indicated as a cause of death, except in status epilepticus. Patients with brain tumors, meningitis, encephalitis, or ruptured aneurysm may have convulsions but the seizures are not regarded as directly responsible for death of the patient. Moreover, epileptics frequently develop other somatic diseases including lung pathology, cardiac disorders, and gastrointestinal disturbances. Convulsions electrically induced differ in no way from those seen in epileptics except for the onset. Seizures in epileptics are slow and gradually progressive, whereas the conventional, electrically induced convulsion is sudden and abrupt, with severe muscular contractions. Our objective was to induce a seizure more closely simulating that seen in the ordinary epileptic. It is believed that the threshold level necessary for cortical release varies with the individual. Some observers believe that in epileptics there is a constant accumulation of energy requiring periodic release. This summation of accumulated energy finally precipitates a convulsion. In our method of treatment, subconvulsive, multiple stimuli are administered in rapid sequence in an attempt to produce a summation effect more closely simulating the grand mal of the epileptic.

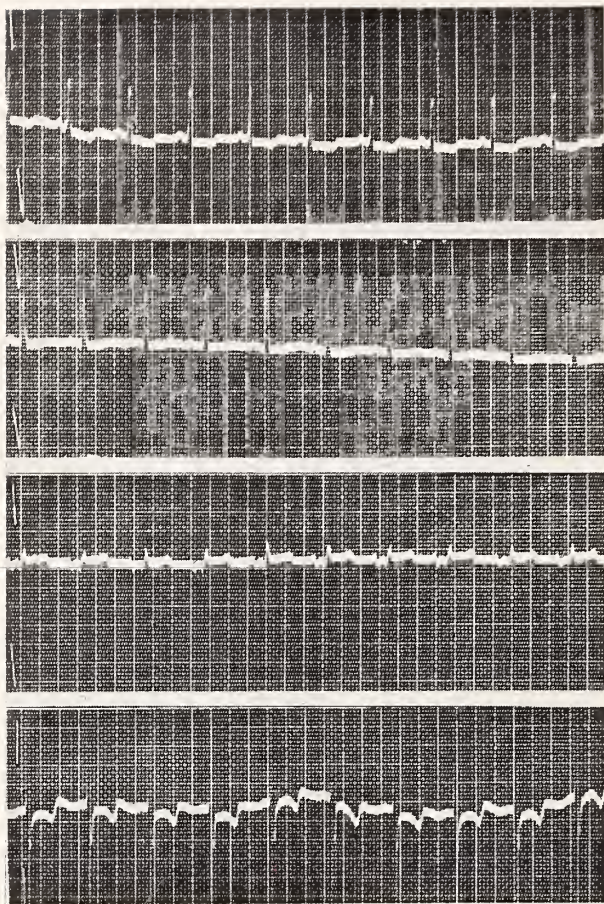


Figure 1

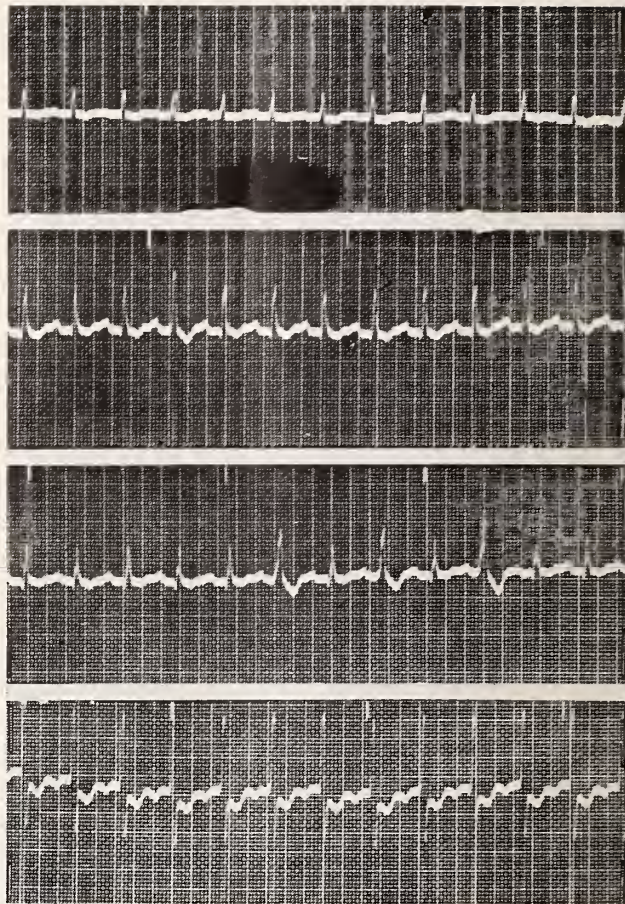


Figure 2

The descriptive term "Fractional Summation Method" was designated for this method of application of electric shock therapy. In approximately 20,000 treatments, there have been no deaths or fractures of extremities as a direct result of treatment. Several dislocations of the temporomandibular and shoulder joints were easily and immediately reduced.

In our experience, the following technique of restraint proved to be the method of choice. A trained attendant (or nurse) sits alongside the patient holding the mouth gag in place with one hand. Patient's arms are crossed over the chest and held in place with the free forearm. Thus, the patient's jaw is held firmly and his shoulders fixed in internal rotation and adduction. The patients are treated in their own beds with a simple, curved, padded board placed beneath the small of the back. The intent is to avoid excessive resistance to the muscular contractions during the seizures, for when two resisting forces clash, something must give way, and this, it is thought, is responsible for many fractures of extremities.

The following case histories were selected as

representative of the group of 280 patients in which concurrent, severe organic disease existed.

M.D. — A 90 year old female, weighing 80 pounds, was agitated, delusional, and refused nourishment. Physical examination revealed generalized emaciation, blood pressure 144/96, and evidence of cardiac enlargement. The E.K.G. (Figure 1) showed marked, left-ventricular hypertrophy. In spite of her advanced age and poor physical condition, she was given 12 electro-shock treatments with sufficient improvements in both her physical and mental condition to permit discharge in six weeks.

M.C.E. — A 63 year old female, weighing 67½ lbs., had been bedridden for several months. She was depressed and delusional. Physical examination revealed generalized emaciation, muscular wasting, and advanced arthritis. The E.K.G. showed marked sinus tachycardia and severe myocardial damage. In the course of 18 electro-shock treatments, she began to eat and became ambulatory; she was discharged in seven weeks, physically and mentally improved.

G.T. — A 29 year old female, transferred from a General Hospital, having delivered a normal child two weeks previously by Caesarian section. Immediately following delivery she had developed symptoms of an agitated depression. She received a total of eight treatments and was discharged as recovered after a three week stay in the sanitarium.

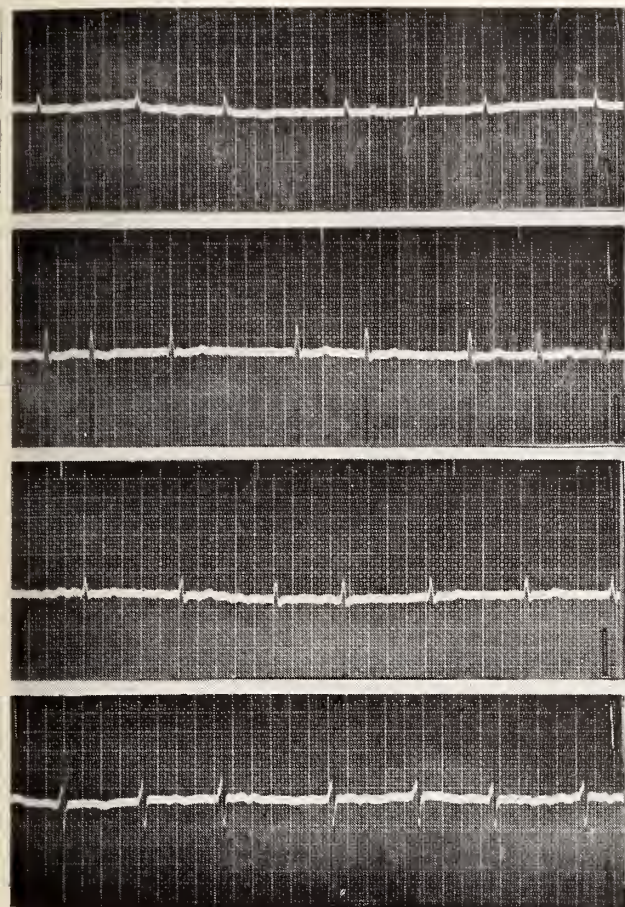


Figure 3

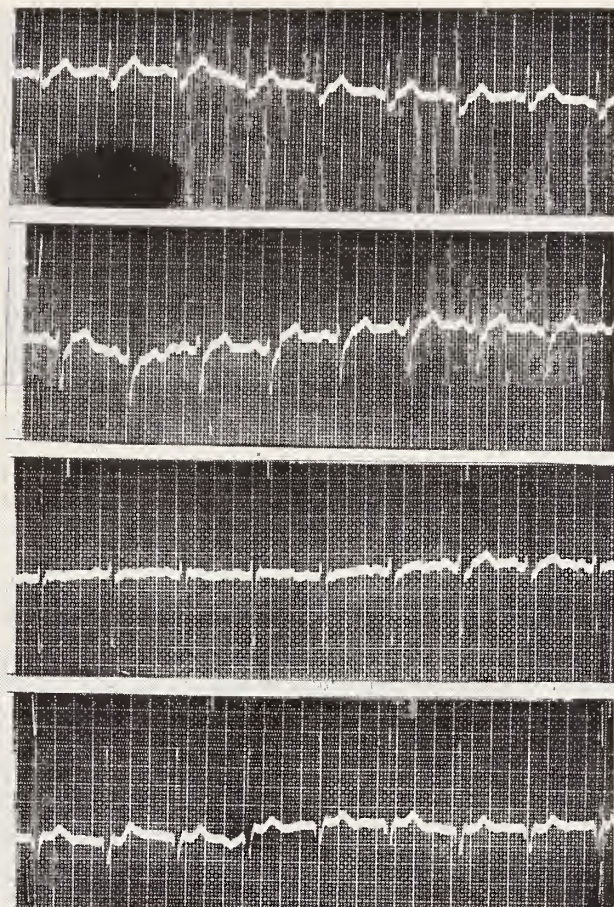


Figure 4

J.C. — A 27 year old female entered the sanitarium seven months pregnant, with mental symptoms of a (paranoid) Schizophrenia. She was poorly nourished with physical findings of rheumatic heart disease manifested by mitral stenosis and insufficiency. She remained in the sanitarium a total period of six weeks, receiving twelve treatments, and discharged as recovered. One week after discharge from sanitarium at term she was admitted to a general hospital, giving birth to a normal child.

E.L. — A 49 year old female gave a history of recurrent depressions with nine admissions to State and private institutions since 1924. She had made five attempts at suicide. Electro-shock therapy was considered dangerous because of a history of lung abscess and current findings of severe bronchiectasis, pleural thickening, adhesions, herniation, and a shift of the mediastinum. Nevertheless, she was given eight electro-shock treatments and was discharged in three weeks recovered from her current episode.

A.C. — An obese 63 year old male with general paresis, had a left hemiparesis and left central facial palsy. He was extremely disturbed, boisterous and resistant to management. Physical examination also revealed liver enlargement, abdominal ascites and pulmonary emphysema. Since his condition precluded immediate use of fever therapy, electric-shock treatment was given to decrease the psycho-motor activity. In all, twelve shock treatments were administered, after which the patient became manageable, responding to subsequent

fever therapy. He was discharged decidedly improved.

G.C. — A 62 year old female had been hospitalized three times previously for diabetes, hypertension and chronic myocarditis with cardiac asthma. On admission to the sanitarium the patient exhibited an acute psychosis with nihilistic and somatic delusions. Blood sugar was 160 mgm. percent and blood pressure 212/100. The heart was enlarged to the left and the E.K.G. revealed extrasystoles, marked left ventricular hypertrophy, and myocardial damage. The fundi displayed typical hypertensive retinopathy. Over a period of four weeks, in which she received nine electric shock treatments, she made an excellent recovery.

J.H. — A 73 year old male exhibited depression and delusions of persecution. Physical examination revealed a hypertension of 230/120, liver enlargement, pitting edema of the lower extremities, and rales at the base of both lungs. The heart was markedly enlarged with loud systolic murmurs at both base and apex. E.K.G. (Figure 2) showed marked left ventricular hypertrophy, extrasystolic arrhythmia, and severe myocardial damage. Over a period of three weeks he received nine electric shock treatments and was discharged as recovered.

J.C. — A 56 year old male was extremely agitated, violently disturbed and actively hallucinating. Physical examination revealed distant heart sounds and marked arrhythmia. The blood pressure was 90/60. E.K.G. (Figure 3) showed myocardial damage with auricular fibrillation. He received fifteen electric shock treatments,

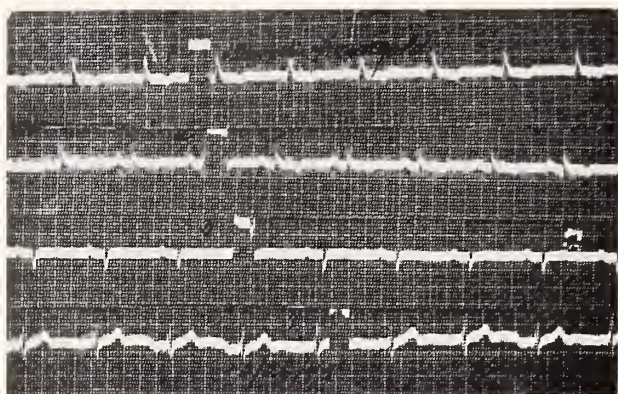


Figure 5

made an uneventful recovery, and was discharged. A short time later, mental symptoms recurred and he received another course of fifteen treatments as an out-patient.

C.H. — A 66 year old male was admitted with a diagnosis of manic depressive psychosis, depressed phase. He had previously made several suicidal attempts and in 1940 he had completely amputated his penis in an episode of depression. These recurrent episodes required hospitalization in both State and private institutions on several occasions. Physical examination revealed marked cardiac enlargement. E.K.G. (Figure 4) revealed evidence of right bundle branch block. He had an uneventful recovery after nine electric shock treatments. (Figure 8. E.K.G. of another patient with bundle branch block who received electro-shock treatment.)

D.F. — A 73 year old male displayed agitation and somatic delusions. Patient was emaciated, debilitated and refused to take nourishment. Weight was 105 lbs. on admission. Physical examination revealed an emphysematous chest, sonorous and sibilant rales in both lungs, distant heart tones and tortuous brachial arteries. E.K.G. (Figure 5) showed evidence of old coronary occlusion. There were arteriosclerotic changes in both fundi. Over a period of 4½ weeks, he received eleven electric shock treatments and was discharged as recovered.

B.S. — A 47 year old female was transferred from a general hospital where she was receiving treatment for thrombophlebitis of the left leg. She became acutely disturbed, delusional and actively hallucinating. Temperature was elevated and local evidence of phlebitis was present. She refused to take nourishment and was running a progressively, down-hill course. In spite of the vascular condition, electric shock treatment was given, and after nine treatments she recovered from her mental disorder and was released.

E.N. — A 64 year old female, with a history of coronary occlusion in 1938, was markedly disturbed, confused and actively hallucinating. In addition to the cardiac history, she had also had cholecystitis and severe rheumatoid arthritis. E.K.G. (Figure 6) revealed signs of marked left ventricular hypertrophy, extrasystoles, old coronary occlusion and severe myocardial damage. She was given eight electric shock treatments over a period of three weeks and discharged

as recovered. Only in a few cases did we trace the immediate effects of electric shock therapy on the electrocardiogram. In this case, on admission, electrocardiogram revealed a sinus tachycardia, extrasystolic arrhythmia, left axis shift and myocardial damage. After five treatments, the patient's psychomotor activity decreased and electrocardiogram (Figure 7 A) revealed a heart rate of 76 to 80 and improvement in the S.T. segment and T waves. Four minutes after a convulsion during her sixth treatment, we still saw signs of severe myocardial damage becoming obvious in connection with tachycardia. The S.T. segments became deeply depressed, T waves flattened, and leads III and V markedly negative (Figure 7 B). This is similar to the exercise test of a person with myocardial damage. However, this lasted only a brief period compared to the constant tachycardia of the same patient before treatment. We may, therefore, conclude that the mental state of such a patient is more deleterious upon the heart than electric shock therapy.

CONCLUSIONS

(1) A method of electro-shock treatment and its technique of application has been described and designated the "Fractional Summation Technique".

(2) 280 cases of mental disease with associated severe organic disorders were treated by electric shock therapy, with no resultant untoward complications.

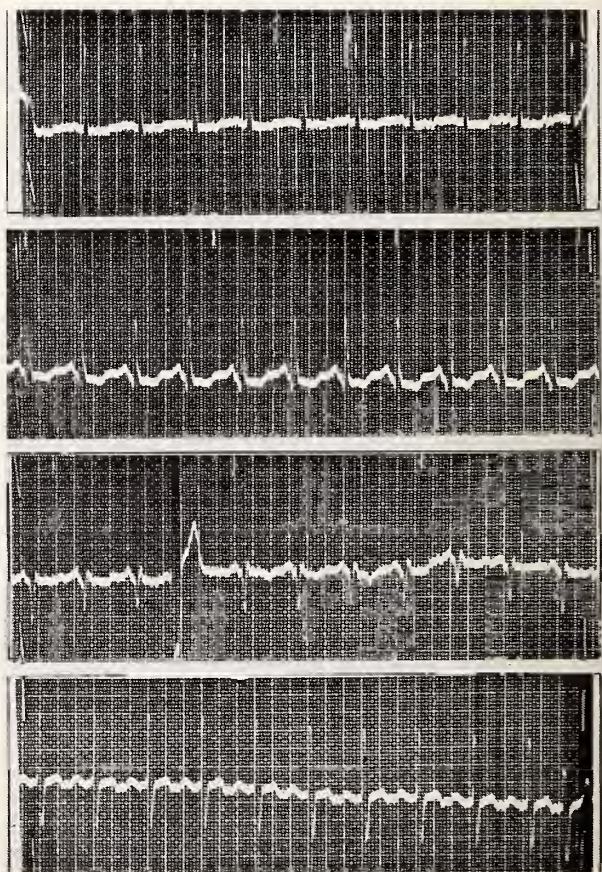
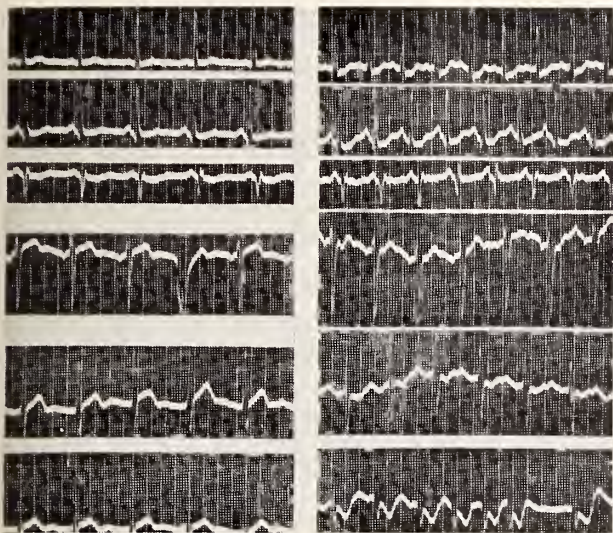


Figure 6



Figures 7a, 7b

(3) Approximately 20,000 electric shock treatments were administered over a period of four years without resultant fractures or death.

(4) Based on the experience outlined above, using this method of treatment and technique of application, it is felt that the variety and number of organic contraindications to electric shock treatments can be minimized and the therapy should be given when psychiatrically indicated.

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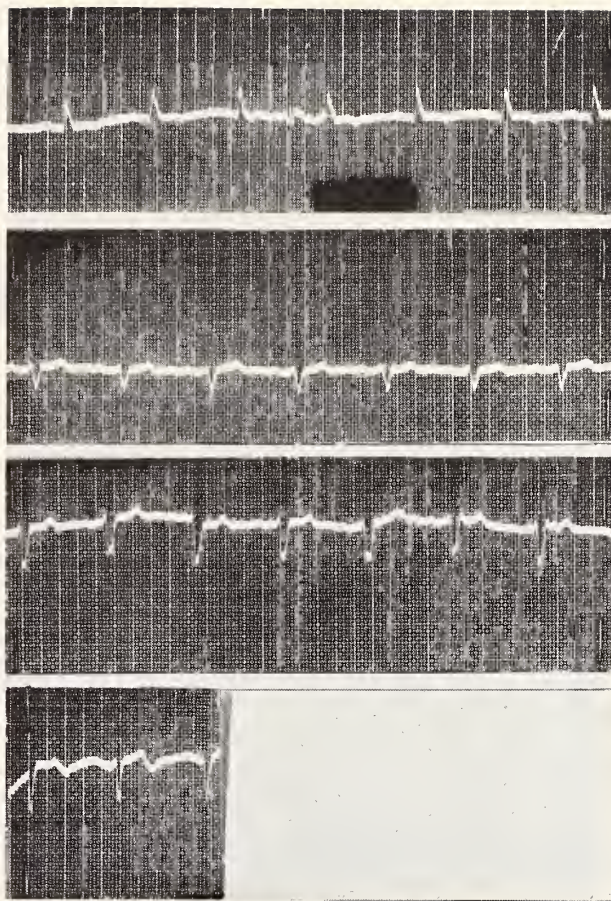


Figure 8

SANDOZ APPOINTS NEW FIELD REPRESENTATIVES

Sandoz Pharmaceuticals of New York announce the appointment of two new representatives to the Sandoz professional service staff and who will serve the Chicago Area.

Mr. Robert Keating was a student at Loyola University and during the war served in the Coast Guard. Mr. Charles Reitman is a graduate of the College of Pharmacy — University of Illinois, and during the war was a Technical Sergeant at the Virus Laboratories in the Medical Dept. of the U. S. Army.

Both men have received an extensive period of training in the Sandoz Laboratories in New York under the direction of the Medical and Pharmacological Departments.

TAX GUIDE FOR PHYSICIANS

The "Schering Physicians' Income Tax Guide", a 93 page compilation of essential information on the proper completion of federal income tax estimates and returns, is being distributed to the medical profession upon request by Schering Corporation of Bloomfield, New Jersey. Every possible situation is covered clearly and concisely, from general tax return procedure to such problems as bad debts or the deductibility of reading matter for the physician's waiting room.

Prepared especially for physicians by tax experts, Hugh J. Campbell and James B. Liberman of New York, the tax guide includes charts of sample tax returns, completely filled in, and accompanied by lists of permissible deductions.

CASE REPORTS



Erosion of the Gastroepiploic Vein Simulating an Ulcer Syndrome

**Leonard B. Shpiner Ph.D., M.D.
Kankakee**

The causes underlying hematemesis or melena or both are diverse and often difficult to recognize. It is not always possible during active bleeding to determine the causative factors of hemorrhage because the condition of the patient may not permit the usual diagnostic procedures to be carried out. This case is instructive and merits reporting because it illustrates the admixture of etiological ingredients of an ulcer syndrome, problems in management, and the speculative pathologic dynamics which led to the patient's demise.

The patient, a white male age 38 years, had a gradual onset of pain in the epigastric area about seven years ago, incident to or simultaneous with a change in occupational status (from farm to factory worker). The character of the pain

became more acute and intense, appearing between meals and relieved by milk, cold water, and rest. There was no history of food selectivity, nor dyspepsia. At the height of his pain he occasionally vomited. No referral of pain to other body areas was complained of. He had three previous admissions:

1. — On January 6, 1942, an appendectomy was performed, and at that time, an additional diagnosis of myocarditis was made.

2. — On February 11, 1943, patient was admitted because of pallor and dyspnoea due to loss of blood. He had both hemoptysis and melena. The RBC at time of admission was 900,800. Six blood transfusions as well as antacid medication was given him. No x-rays of the GI tract were taken, and after a two week stay, he recovered. The presumptive discharge diagnosis was "bleeding duodenal ulcer."

3. — On August 9, 1945, he was hospitalized because of symptoms of nausea, emesis, jaundice,

Presented before the St. Mary's Hospital Staff, March 2, 1948.

From the Medical Service, St. Mary's Hospital, Kankakee, Illinois.

moderate right upper quadrant pain and rigidity, and icteric sclera. X-rays taken of the GI tract were negative. Following visualization tests, diagnosis of pathology of the gall bladder was made, because it appeared larger, emptying time was poor, no shadows of calculi were seen, and the possibility of adhesions to the duodenal bulb was postulated.

On August 13, 1945, patient was seen at the Research Hospital, University of Illinois, essentially with the complaints of pain in the stomach, appearing rhythmically between meals, and especially in the morning after working hours. X-ray of the GI tract was negative, with the exception that there was a slight posterior displacement of the oesophagus indicating a left auricular enlargement. An EKG showed auricular fibrillation with intermittent heart block. All other laboratory data were non-informative. to the Research Hospital for hemorrhoidectomy,

On May 1, 1946, patient was again admitted and following the operation auricular fibrillation developed. He responded to the administration of oxygen and caffeine, and was discharged on May 5, 1946.

He was subsequently referred to the author, and was first seen on Jan. 14, 1947 for evaluation and treatment of the heart ailment. The EKG taken revealed auricular fibrillation, left ventricular preponderance, indicating myocardial damage. The etiology of the carditis could not be ascertained on related history, it was therefore postulated that an atypical attack of rheumatic fever was the focal factor. He had been previously placed at bed rest for protracted periods plus cardiac drug therapy with no sustained benefit. Since he at no time manifested any evidence of cardiac decompensation, he was placed on a moderate activity program plus sustaining doses of digitalis, and interval periods of quinidine therapy. On this regimen he was able to work, reporting only at stated periods for reexamination. In the period under observation of one year, he did not lose work because of his heart disability. In one period of a week in November, he complained of an ulcer symptomatology which was ameliorated by antacid medication.

A personality profile of this patient revealed that his mother was treated for hyperthyroidism, and his father who had ulcer symptoms of long standing, was recently operated upon. The patient himself was a person of energetic dis-

position and drive, prone to anxiety tension states, and apprehensive periods, with easy irritability incident to his marginal economic status, and the stresses peculiar to his daily routine. It was following a distressing family episode the ulcer symptoms came to the fore in November 1947.

On the day of admission to the hospital, Jan. 17, 1948, he complained of upper abdominal distress, vomiting with occasional blood noted, and tarry stools. On examination he appeared moribund, dyspnoeic, and his skin was pale, cold and clammy. The blood pressure was 120/72, his abdomen was soft to palpation, with tenderness to touch in the epigastric area. He was sent to the hospital with the tentative diagnosis of bleeding "gastric" or "duodenal" ulcer. Because of his general condition, and the history of heart disease, it was deemed advisable to undertake medical management. During this period he developed a hyperpyrexia, which was thought to be a transfusion reaction, since physical examination revealed no clinical findings. Under this treatment schedule he would seemingly show both subjective and objective gains for a period of 3-5 days, then hemoptysis would ensue, and relapses occur. All in all he had 12 pts. of blood in a period of two weeks, and as no sustained clinical improvement was manifested, surgical intervention was advised. (On admission — hemoglobin was 9.1 gms. or 58%, RBC — 2,760,000, CI — 1.0. On day of operation hemoglobin was 4.5 gms. or 34%, RBC — 1,920,000, CI of 0.90.) On February 1, 1948, an exploratory duodenostomy and gastrostomy was done. A sole bleeding gastric vessel was located in the upper greater curvature of the stomach, and this was ligated. Following the surgery, he showed objective gains for a period of 12 hours, (hemoglobin was 11.5 gms. or 72%, RBC — 3,790,000, CI — 0.97) then an acute cardiovascular collapse intervened, and exitus occurred.

Autopsy Report: Briefly, the necropsy findings showed no varices of the oesophagus, the stomach was distended with blood. Close scrutiny of the gastric mucosa revealed a small eroded vein, a probe passing easily into and along the course of the vein to the greater curvature aspect in the supero-lateral direction. By transmitted light the vein did not appear unduly tortuous, and was about the same caliber as

the adjacent venous channels. No aneurysmal, nor plexiform formation was detected. There was no evidence of gastric or duodenal ulcer, or scarring to indicate healed ulcer in these areas. The heart revealed a moderate left ventricular hypertrophy, and the myocardium was streaked with minute foci of gray-white fibrous tissue. The rest of the body organs were all within normal limits.

Microscopic Examination: The mucosa showed a mild chronic gastritis. The vein wall appeared to be normal.

Anatomic Diagnosis: 1. — Acute erosion of fundal branch of the right gastroepiploic vein, ruptured varix, or acute gastric erosion. 2. — Massive gastric hemorrhage, fresh bloody content small and large intestine. 3. — Acute anemia of viscera. 4. — Chronic rheumatic heart disease, moderate left ventricular hypertrophy, minimal healed mitral valvulitis. 5. — Moderate pulmonary edema and congestion. 6. — Recent healing right para median epigastric surgical incision, and sutured incisions at the initial portion of the duodenum-and mid-anterior aspect of stomach. 7. — Healed focal fibrous pleuritis, in the right apex of lung. 8. — Minimal atherosclerosis of aorta.

DISCUSSION

In a retrospect analysis of this case; the patient was a relatively young male, presenting an ulcer diathesis, with coexisting rheumatic heart disease, and a hyperacidity responding at various times to antacid medication. There was a previous history of bleeding from the gastrointestinal tract in which six blood transfusions and antacid therapy resulted in recovery, and negative gastrointestinal x-ray findings on two different occasions. There was no blood dyscrasia, neither was there a history of trauma prior to onset of his last attack of bleeding. The necropsy findings only revealed a mild chronic gastritis, and an eroded gastro-epiploic vein. The caliber and structure of the vein was essentially that of the neighboring vessels. There was no evidence of telangiectatic dysplasia nor varices of the gastric veins. The duodenal as well as the gastric mucosa revealed no evidence of scarring to indicate the prior presence of a healed ulcer area.

Since the vessels of the stomach are not end vessels, erosion of a blood vessel of that organ may

occur as a result of the digestive action of the gastric juice (or the result of stasis due to protracted irritation of motor nerves).

That chronic gastritis in itself might lead to an erosion of a major vessel by diminishing the cellular resistance of the gastric mucosa to the acid-pepsin factor, is a probable conjecture. Shindler¹ noted that 50% of all patients gastroscopied had evidence of chronic gastritis. Furthermore, mucosal hemorrhages and erosions were occasionally found in an otherwise perfectly normal mucosa. However, this patient had one previous hemorrhage, and the gastric mucosa showed only evidence of a mild gastritis, and no histologic evidence of previous hemorrhages or erosions.

The following mechanism is suggested as a more tenable explanation for the production of the erosion of the gastro-epiploic vein.

Although the general correlation between physical disease and personality profiles are probably true enough, but do not help much in the management of a disease problem, since the particular patient may be an exception to the general rule. At any rate Wolf and Wolff² have shown that sustained intensified emotions do produce physiological changes by affecting tonus, increased acid gastric secretions and increased vascularity of the stomach.

In terms of disease dynamics and the individual as a structural unit, the tidal emotional storms incident to environmental stresses, produced an autonomic nerve imbalance, including vasomotor changes. The focal vascular spasm produced a local anemia, which in the presence of a chronic gastritis diminished the cellular resistance to the acid-pepsin factor. The combination of psychosomatic factors caused an erosion of the blood vessel, with resultant hemorrhage and the demise of the patient. This postulate is more tenable in lieu of the autopsy findings.

CONCLUSION

An unusual case is reported of an erosion of the gastroepiploic vein which caused the demise of the patient. A tenable explanation in lieu of the pathologic findings is advanced to account for its occurrence.

Arcade Building.

Grateful acknowledgement is made to Dr. Arno B. Luckhardt, Professor of Physiology, Univ. of Chicago; Dr. A. Nehf, surgeon and Dr. J. W. Henry, pathologist at St. Mary's Hospital, for their criticisms and

advice in the preparation of this paper.

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Polyneuritis with Bladder Paresis Following Rabies Vaccine Injections

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Meakins¹ in discussing rabies states that peripheral *paralysis* following the use of rabies vaccine occurs in one out of 5000 cases. He states that the condition is largely of academic interest. Peripheral *neuritis* (Polyneuritis) occurs more frequently, but is still so rare that most physicians feel they can use rabies vaccine with impunity. Dog bites are numerous and the prophylactic injections are used freely.

The case I am reporting is to me of more than academic interest, as it occurred in the person of my daughter. The patient is married, age 27 years, previous health good. On December 17, 1947, while in Flossmoor, Illinois, she petted a dog and is sure the animal licked her hand. Two days later the dog died of convulsions and other symptoms resembling rabies.* The veterinarian sent the head to the State laboratory, but during the Christmas rush delivery was delayed, and it was not received until 8 days later, and was too decomposed for satisfactory examination.

It was decided to give the daughter rabies vaccine injections, and these were started January 4, 1948. The vaccine caused considerable local reaction from the beginning. After the 11th injection she complained of feeling "grippy"; headache, backache, pains in limbs, temperature 100°. Next day (12th injection) she

complained of weakness and pains in arms, legs and thighs, and these pains were aggravated by movements and by deep pressure; T 100°. That evening she began to experience bladder discomfort — difficulty in starting stream, some dysuria, and the feeling that bladder emptying was incomplete. It was mid winter and the "flu" was prevalent and we felt it might be the latter condition. Next morning she was frightened to discover that although she felt painfully distended, she could not void. An enema, hot applications and injection of atropine all proved unavailing and catheterization was necessary. She took atropine orally that day. Rabies vaccine was discontinued that day, January 16th. A complete examination was made at this time. Patient complained of backache, headache, pains in arms legs, thighs; paresthesia in arms, hands and legs. She experienced great difficulty in walking, due to pain, weakness, and inability to control legs. This also applied to upper extremities; — she could scarcely lift a cup to the mouth on account of pain on movement, weakness and ataxia. She had difficulty turning in bed, the glutei and thigh muscles being involved. She felt marked pain on passive movements of extremities and also on deep pressure. She described the pain as tearing or dragging. Knee jerks

and achilles jerks present, but weak, plantar reflex normal, abdominal and glutei reflexes absent; neck sign negative, no muscular rigidity anywhere. Cutaneous hyperesthesia was present particularly in dorsal and lumbar regions, where it was high grade; also over epigastrium. Pin pricks felt in all areas. No paralysis present. Her main symptoms were pain, extreme weakness, and very marked ataxia. Bladder paresis was present. P119 T101 R22.

At this juncture and once afterward during her illness, I conferred with Dr. Edward A. Piszczek, Cook County Director of Public Health. His splendid cooperation and valuable suggestions were at all times most reassuring. (Some of Dr. Piszczek's observations appear later in article.)

The following day she was unable to walk and could not feed herself. She did not walk until the 10th day and did not feed herself until the 7th day. The low grade fever continued for 7 days and the fast pulse which was out of proportion to the fever, continued 8 days. Profuse sweating was a prominent symptom for the first 5 days. For many years patient had been subject to hyperhidrosis, especially of hands and feet. Nine days after onset of polyneuritis, she noticed that the hands and feet were continuously dry. This anhidrosis continued for over one month. The latter disappeared very gradually, being eventually replaced by the usual excessive perspiration.

Fortunately there was at no time any involvement of the respiratory muscle.

Symmetry of involvement was an important feature; both legs and both arms, in contrast to poliomyelitis. This case could well be classed as the ataxic form of polyneuritis, the so called "acute recoverable ataxia", the onset resembling an acute infectious disease in a previously healthy individual. She did not develop paralysis, but it was apparently a narrow escape. Had further injections of the rabies vaccine been used, the situation could well have become much more serious. The bladder condition, while causing us great concern, would be termed a paresis. Patient was catheterized twice each day for 14 days. The development of cystitis was inevitable, this being observed on the 8th day in spite of prophylactic measures from the start. The fact that she always felt pain when

her bladder was distended indicated that bladder sensation was intact. (Not a cord bladder.) Also after cystitis developed, with tenesmus, she could recognize contractions of neck of bladder, indicating that we might surely expect the motor function to eventually return.

The following quotation from Strumpell and Seyfarth² seems in order: "The extraordinary regenerative capacity of the peripheral nervous system is one of the most important factors in neuropathology. It is very simply explained by the persistence of the parent cells, (the motor ganglion of the anterior horn,) from which fresh peripheral fibres grow out like the fresh branches from a lopped tree. Hence the most severe cases of peripheral paralysis and ataxia may finally recover completely."

Treatment.—In the beginning atropine was used with no benefit. Prostigmin was then used for three days with no result. On the seventh day Furmenthide³ was started and used for three days with negative results. Mecholyl⁴ was then used orally and was continued for two weeks. Patient always contended the latter gave tone to bladder, even before function returned. Each day she received thiamin hcl 100 mg. plus 2cc. of a strong B complex preparation intramuscularly. Three capsules of a heavy B complex were given orally each day. After bladder function returned the above were gradually diminished. Urinary antiseptics were used orally before and after the advent of pyuria. As soon as its function returned the bladder was not again invaded, not even for irrigation. The urine cleared promptly after patient was able to void. The normal bladder function returned very gradually, the patient passing small quantities frequently and gratefully. For some time we had the feeling that some residual urine was present, but endeavored to choose the lesser of two evils and stayed out of the bladder. For a period of six to seven weeks this viscus was irritable with considerable frequency. From the beginning the patient complained of constipation, which had never been present before. She stated, "I just have no power there." Enema was not always successful and a laxative was frequently necessary in addition. Rectal control was very imperfect. Incontinence developed a number of times following the use of cascara.

Complete rectal control returned on the sixteenth day.

Dr. Piszczek⁵ advised me of several cases in which the injection of rabies vaccine was followed by a condition more or less similar to the one here reported. In these cases neurological symptoms appeared on the 6th, 8th and 9th days after the vaccine was started. The severity of symptoms was so great that it was necessary to interrupt the course of injections. Two of these cases had been bitten by dogs which were definitely rabid, as proved by laboratory examinations, and it was imperative that the injections be continued. In these cases he had advised the use of large injections of B¹ up to 100 mg.

or more each day and feels that its action is valuable. In 48 hours it was possible to resume the rabies vaccine.

Dr. Piszczek feels that the exact cause of these harsh reactions is a moot question. They could be due to a virus, a toxin, allergy, etc.

At this time (July 1948) the patient is fully recovered in every regard.

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RESPONSIBILITY IS YOURS

You may remember the day you took the Oath of Hippocrates; but you probably don't. You may remember what the Oath imparts, but probably not. You might have a copy of it, but again you probably haven't.

You may think this all makes little difference; but you may be wrong—dead wrong. The public hasn't forgotten the Oath. They know it very well, at least its ideals and intent if not the words. This little scrap of thinking is the one that centuries ago placed your profession on a higher plane than most human endeavors ever go.

Medical education has brought scientific skill to the patient's door but just as important is the interpretation of the Hippocratic Oath to that patient.

Intentionally or unintentionally misconceptions appear, such as—a doctor cannot refuse to make a call—a doctor must answer an emergency, etc.—interpretation is necessary and essential on an individual basis even in the middle of the night.

When the phone rings at 3:00 a.m. you curse the day Hippocrates was born, but comes the dawn and reason, you are proud of your heritage and the respect it accords you. It matters not if ten million people are cared for, if one goes without aid the people are unhappy. The public

is not interested in your personal health; but only in your being the instrument of their faith in the profession. Some doctors (none in Wichita, I hope) are convincing them that emergencies must come on schedule and that it isn't "cricket" to get sick at home. We don't really believe this; but their actions are speaking louder than our thoughts.

Many of my lay friends tell me you can't get a doctor out at night. One person even printed such an affront. You don't believe this is true; but if the people think so, it might as well be so. The regime in Washington will not force socialized medicine down our throats but the people can and may do so. Yours is the responsibility, not the Sedgwick County Medical Society, not the Kansas Medical Society, not the A.M.A., not a political party.

You still have a chance to get into the act before the curtain goes down. Play your part with zeal. Pray the audience will recognize your part; and also recognize you as an essential to the American way of living, and the heritage that is ours.

Me! I'm going to get three copies of the Oath of Hippocrates, place one in my waiting room for all to see, one under the glass of my office desk, and last but not least, one on the night table, printed in luminous paint. Will you join me?—D.P.T.

Wichita Kansas Medical Bulletin, 1, 4, '49.

PATHOLOGY CONFERENCES

EDWIN F. HIRSCH, DEPARTMENT EDITOR



Presentation of Three Cases

Edwin F. Hirsch, M.D.

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Glomerulonephritis in a Child

A white female child aged 5 years was admitted to St. Luke's Hospital with a tentative diagnosis of nephritis. At the age of 1½ years she had had a sore throat and was treated with sulfa drugs. Following this her parents noted occasional puffiness of the tissues about the eyes and intermittent swelling of the body and occasional light colored stools. At the age of 3 years a urine examination revealed a marked albuminuria. A diagnosis of nephrosis was made. The patient received plasma every two weeks and at times every week from July 1946 to April 1947. Between April 1947 to September 1948 the child was symptom free. During September 1948 the edema recurred. She was troubled with headaches, anorexia and was listless. On October 17, 1948 she had a convulsion. The day following the convulsion the child entered the hospital.

This well developed and well nourished child with edema of the face, eyelids and trunk was drowsy, irritable and had generalized twitchings. The blood pressure was 140/95 mms. of mercury, the temperature 99°F., the pulse was 128 and her respirations were 22 per minute. The posterior pharynx was hyperemic and fresh blood was in the nasopharynx. There were rales and dullness to percussion over the base of the right lung but not the left lung. The heart had a systolic thrill and murmur at the apex and was enlarged to percussion. The liver and spleen were not palpable. The acid, lemon-colored urine had a specific gravity of 1.010 and contained 200 mgms percent of albumin, a few epithelial cells and 3 to 5 leucocytes per high power field. There were 7,350 leucocytes, 2,120,000 erythrocytes per cu mm. and 6 grams percent of hemoglobin. The differential count



Figure 1. Marked myocardial hypertrophy with chronic glomerulonephritis.

of 100 leucocytes revealed 74 neutrophils, 16 lymphocytes, 5 bands, 2 monocytes, 2 eosinophils and 1 basophil. The nose and throat cultures were negative. The urea nitrogen was 190, the non-protein nitrogen 137, the creatinine 10.1, the blood sugar 81, the cholesterol 283 and the chlorides 560 mgms percent. The total proteins of the blood plasma were 3.95 grams of which 2.77 grams were albumin and 1.18 grams were globulin. The child was given supportive therapy, penicillin and sedation. Following 500 cc. of 1/6 molar lactate and 250 ccs. of whole blood a tonic and clonic convulsion developed which lasted 2-3 minutes and was terminated by intravenous sodium amytal. The azotemia increased and the child gradually became more listless, cyanotic, dyspneic and irrational. Death occurred on October 20, 1948. The clinical diagnosis was chronic glomerulonephritis.

The essentials of the anatomic diagnosis of the necropsy are:

- Chronic glomerulonephritis — uremia;
- Hyperemia and fatty changes of the kidneys;
- Hypertrophy and cloudy swelling of the myocardium of the heart;
- Fatty changes of the lining of the aorta;
- Hyperemia and edema of the lungs;
- Hyperemia and fatty changes of the liver;
- Hydropericardium;
- Bilateral hydrothorax;
- Ascites;
- Anasarca.

The abdomen contained about 100 cc. of clear yellow fluid with a little fibrin; the left

pleural space had 600 cc. of similar fluid, the right 300 cc.; and the pericardial sac had 75 cc. The lining of the abdominal portion of the aorta had slight fatty changes. The heart weighed 200 gms. The valvular structures were unchanged but the myocardium, especially of the left ventricle was hypertrophied (Figure 1). Each kidney weighed 40 gms. The capsule stripped with difficulty from a granular pale brown cortex with dilated stellate veins. The pale cortex was reduced to 3 or 4 mms. and at the junction of the cortex and pyramid tissues were many pale yellow streaks (Figure 2). These were also in the columns of Bertini. The height of the brown pyramid tissues was 1.7 cm. The histologic changes of the kidney were those of chronic glomerulonephritis. The yellow streaks in the cortex were lipid deposits.



Figure 2. Chronic glomerulonephritis and fatty changes of the kidney.

These with micropolariscopic examination proved to be doubly refractive, and with the physical properties of cholesterol esters. The spleen weighed 90 gms., the liver 1140 gms. The lungs weighing 340 and 320 gms. respectively were hyperemic and edematous.

COMMENT

The illness of this child followed the pattern of glomerulonephritis in early life, initiated by an infection and continuing progressively with death in uremia within a few years. Exacerba-

tions of the symptoms occurred as the disease progressed. Hypertension, nitrogen retention, anemia, marked albuminuria, changes in the plasma proteins and edema developed with the progress of the illness. Proliferative growths of tissues in the glomeruli with sequential scarring and focal lipid (cholesterol esters) deposits were the main changes of the kidneys. The myocardium of the heart hypertrophied with the hypertension and the lining of the aorta had moderate amounts of atherosclerosis.

Ruptured Aneurysm of the Basilar Artery

A 53 year old white male entered St. Luke's Hospital for the ninth time on October 29, 1948. His first admission from December 10 to 24, 1940 was for coronary thrombosis. He entered the hospital for the second time 3 years later from November 22 to 27, 1943, with complaints of constriction of his heart, but electrocardiograms had no significant changes, and he was discharged with a diagnosis of arteriosclerotic and hypertensive cardiovascular disease. His blood pressure at this time was 140/90 mm. Hg. About this time he began to have dyspnea without orthopnea, chronic cough, weight gain, swelling of his ankles, occasional sharp pains in the right upper quadrant of the abdomen, sharp stabbing pains in both eyes, stabbing pains in his right knee and cramps in both legs which became more marked during the next 3 years leading to his third admission from March 30 to April 6, 1947. His blood pressure on this admission was 178/110 mm. Hg., and an electrocardiogram demonstrated progressive damage to the myocardium. An x-ray of the right knee revealed no bone pathology, and gastrointestinal studies disclosed no significant changes other than diverticulums of the sigmoid and lower portion of the descending colon. He was in the hospital for the fourth time from July 10 to July 31, 1947, with an acute arterial occlusion of the right lower extremity which was caused by a partial thrombosis of and embo-

lism from a large right popliteal aneurysm which had been present for 2 years. On July 16 a right lumbar sympathectomy was performed, followed by a rise in temperature, thought to be due to bronchiectasis and continued circulatory impairment of the 1st and 2nd toes of the right foot. On the day after discharge he re-entered the hospital for the fifth time for 3 days because of an urticaria following penicillin administration and asthmatic wheezes which were brought under control by the administration of antihistamine drugs, sedatives and sodium bicarbonate packs to the skin. However, the 2nd toe and a portion of the 1st toe of the right foot became gangrenous, and he entered the hospital for the sixth time on August 25, 1947. On September 5, the aneurysmal sac of the popliteal artery was obliterated, and this operative procedure was followed by a painful, cold and cyanotic right foot from the mid-plantar arch to the toes necessitating an emergency guillotine amputation just above the ankle on September 14. On September 29 re-amputation of the right leg was performed, and he was discharged on October 30. Two weeks before his seventh admission on January 14, 1948, he began to notice a numb tingling sensation of the entire left half of his body, with impairment of the sensations of position and touch, and with a constant "pins and needles" sensation. Because of impairment of

position sense he had difficulty in walking, and had a tendency to fall backwards.

His blood pressure was 166/112 mm. Hg., his respirations were 22, and his pulse was 80 per minute. There were marked musical rales over the entire chest on inspiration and expiration. The heart sounds were distant, but the heart did not appear to be enlarged on percussion. His abdomen was markedly obese. The right leg had been amputated about 7 inches below the knee. A large pulsating mass was discovered in the left popliteal fossa, but there appeared to be no circulatory impairment in the foot. Neurological examination was not unusual except for the sensation of "pins and needles" to touch on the left side of the body. Laboratory studies including blood counts, urinalysis, sedimentation rate, blood Kahn, cerebrospinal fluid, and electro-cephalogram studies, and basal metabolic rate were within normal limits. On January 22, his ninth hospital day, a block biopsy was performed on the pectoralis major muscle; there were no significant pathological findings. Following x-ray and oscillometric studies which indicated the left popliteal aneurysm extended to the middle of the thigh, on February 4, his twenty-second hospital day, a left lumbar sympathectomy was performed, followed by intra-arterial visualization of the femoral artery using diodrast which revealed considerable dilatation of aneurysmal proportions in the popliteal region, apparently proximal to the bifurcation of the peroneal and tibial arteries. The post-operative convalescence was uneventful except for weakness of his left leg, and after 51 days in the hospital, he was discharged on March 5, 1948, with the thought to readmit him at a later date for wiring the left popliteal aneurysm. His eighth hospital admission from April 7 to 16, 1948, was for bronchopneumonia. His blood pressure was 160/110 mm. Hg., and he continued to complain of numbness and tingling along the left arm and left side in general. With penicillin, pyribenzamine and general supportive therapy he improved sufficiently to be sent home after 9 days in the hospital. He entered the hospital for the ninth and last time on October 29, 1948, complaining of a sore throat and "cold" of 3 days' duration. His blood pressure was 180/120 mm. Hg., his pulse was 80, his respirations were 24, and his rectal temperature was 100.4°F.

A chest x-ray revealed increased bronchovascular markings in both hilar regions. He was drowsy and disinterested in his surroundings, and complained of weakness of the right side of his face on the day following his admission. A urine examination was negative, and the cells and chemical constituents of the blood were within normal limits. A capillary fragility test yielded 12 petechiae. He felt nauseated and vomited his evening meal. He complained of dizziness and of a feeling as though he were to lapse into coma before he actually did become comatose. Respirations were labored, then irregular, and he became cyanotic, and his pulse was unobtainable. Despite 0.3 cc. of neosynephrine, intravenously, the pulse was feeble, and his blood pressure could not be measured. He expired the day following admission.

The essentials of the anatomic diagnosis of the necropsy are:

- Recent rupture of a saccular aneurysm of the basilar artery of the brain;
- Large subdural hemorrhage about the base of the brain;
- Bloody cerebrospinal fluid;
- Flattened convolutions and narrowed sulci of the brain;
- Hyperemia and edema of the leptomeninges of the brain;
- Marked hypertrophy and cloudy swelling of the myocardium and dilatation of the chambers of the heart;
- Bronchopneumonia, bronchiectasis, hyperemia and edema of the lungs;
- Marked atherosclerotic stenosis of the right coronary artery;
- Old infarct of the posterior wall of the left ventricle of the heart;
- Old healed surgical amputation of the right leg.

The obese body of this middle-aged white male weighed 224 pounds and was 178 cms. long. The right leg had been amputated 18 cms. below the knee. The lining of the aorta and its main branches had moderate fibrous and fatty changes. The large heart with 2 cms. each of pulmonary artery and aorta weighed 625 gms. The valvular structures had no significant changes but the chambers were dilated and the myocardium was hypertrophied. In the lateral wall near the septum behind and toward the base was a fibrous

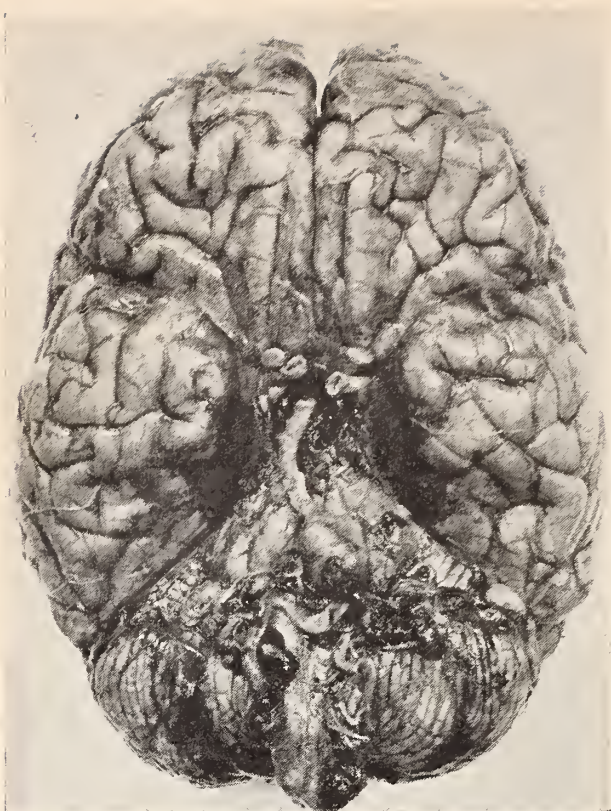


Figure 3. Large ruptured saccular aneurysm of the basilar artery.

scar 6 by 3 cms. and continuous with scar tissues 3 by 3 cms. in the septum. Each kidney weighed 260 gms. The capsule stripped from a smooth red brown surface with foetal lobation markings. The gross changes were mainly those of hyperemia. The spleen weighed 330 gms. and had dark red hyperemic tissues. The liver weighed 2440 gms. The parenchyma was tan-brown mottled with yellow, the lobular markings were distinct. The subcrepitant right lung weighed 750 gms., the similar left 550 gms. The lung tissues posteriorly were hyperemic and edematous. There were no injuries of the

scalp and calvarium. The brain weighed 1510 gms. The cerebrospinal fluid was hemorrhagic and in the posterior cranial fossa was a large amount of clotted blood. On the ventral surface of the pons, upper part of the brain stem and cerebellar hemispheres was a dark red blood clot 9 by 8 cms. and 1 cm. thick that concealed the basilar artery and circle of Willis. Removal of the blood clot disclosed a saccular aneurysm of the basilar artery above the junction of the vertebral arteries, 2.5 cms. long and 2 by 2 cms. in its other dimensions. On the anterior surface near the midline was a spontaneous rupture, 1 cm. long (Figure 3.). The lumen contained dark red thrombus material. The arteries at the base of the brain had moderate fatty and fibrous changes. The convolutions of the brain were flattened. Many surfaces made by cutting the cerebrum, pons, cerebellum and upper part of the spinal cord after formalin fixation had no other significant changes.

COMMENT

The long illness of this patient is marked by a sequence of lesions of the arterial system in various parts of the body. The initial disorder was a coronary occlusion, then a hypertensive state, and later aneurysms of the right and left popliteal artery. Thrombosis of the right popliteal artery led to impairment of the arterial blood flow to this extremity and gangrene which necessitated amputation of the leg below the knee. The aneurysm of the left leg was not associated with as severe complications, although circulation in the leg was impaired. Personality changes indicated circulatory disturbances of the brain, and during his final admission he suddenly became comatose and died. This episode, the necropsy disclosed, was due to rupture of an aneurysm of the basilar artery of the brain.

Malignant Nephrosclerosis With Uremia

A 44 year old Negress entered St. Luke's Hospital on October 7, 1948 and died on November 3, 1948. She seemed well until several months before admission when she developed transient moderately severe headaches in the occipital and orbital regions. Approximately six weeks before entry and because the headaches had become severe, she consulted a physician who found that she had high blood pressure. The severe headaches continued and several medicines were prescribed. She became ill, began to vomit and was admitted to Provident Hospital for further treatment. She was told that her blood pressure with salt-free diet and other medication had dropped considerably. Her relatives brought her to St. Luke's Hospital for further evaluation.

At the time of admission her temperature was 98.6°F. The pulse rate was 104, and the respiratory rate 16 per minute and her blood pressure was 230/125 mm. Hg. Examinations of the head, ears, nose and throat revealed nothing unusual. Ophthalmoscopic examination disclosed hazy disc edges, arterio-venous nicking, exudates and an arterio-venous ratio of 3 to 1. The nodular and tender thyroid was palpable but was not enlarged. The lungs were clear by percussion and auscultation, and there was a moderate to minimal systolic apical murmur over the slightly enlarged heart. The abdomen, back and extremities were normal. The cloudy straw-colored acid urine had a specific gravity of 1.010 and contained 300 mgm percent of albumin but no sugar. The microscopic examination revealed occasional epithelial cells and leucocytes and many bacteria per high power field. The blood contained 3,440,000 erythrocytes and 13,200 white cells per cmm. and 10.3 gms. percent of hemoglobin. The differential white blood cell count revealed 11 lymphocytes, 6 monocytes, 76 neutrophils, 1 eosinophil, 1 basophil and 5 band cells per 100 cells. The blood had urea nitrogen 31.5, non-protein nitrogen 48, sugar 94 and cholesterol 222 mgms. percent. The blood Kahn test was negative and the sedimentation rate was 118 mm. in one hour. A two meter x-ray of the chest revealed nothing unusual and the basal metabolic rate was plus 10. Six days after admission a lumbar puncture was performed and

the clear colorless spinal fluid was released under a pressure of 90 mm. of water. The Queckenstadt test was negative bilaterally. The spinal fluid had a negative reaction to the Wassermann test; the Pandy test was one plus; the gold curve was zero in all tubes and it contained 53 mgm. percent of total protein. The electrocardiogram revealed a sinus tachycardia, depression of T₁ and left axis deviation. Nothing unusual was found with an intravenous pyelogram. A 5 percent excretion in a phenolsulphonephthalene kidney function test occurred in 15 minutes; the urea clearance was 28.6 per 100 cc. of blood and a concentration dilution test of the urine revealed a maximum concentration of 1.010 and a maximum dilution of 1.005. The cold pressor, etamon, breath holding, hyperventilation and sodium amytal tests all revealed fixation of the patient's hypertension. The Rumpel-Leeds test was strongly positive. In view of possibly performing a splanchnic sympathectomy for treatment of her hypertension, extensive diagnostic procedures were carried out during the first week of hospitalization. The medical consultant concluded that she had primary renal disease and advised against a sympathectomy. The non-protein nitrogenous products of the blood continued to increase and on October 23, 1948, her 14th hospital day, the urea nitrogen was 48, the non-protein nitrogen was 114, the creatinine was 5.9 and the chlorides 375 mgms. percent. She developed symptoms and signs of uremia and, in spite of adequate oral and intravenous fluids, her output of urine ranged from 100 to 250 cc. per day. On November 2, 1948 she developed moist rales in the lungs and a marked pericardial friction rub; her temperature rose to 103°F., and her pulse increased to 130 beats per minute. The blood on this date had urea nitrogen 205, non-protein 251, creatinine 9.9 and chlorides 460 mgms percent. She became lethargic, then comatose, and expired on November 3, 1948.

The essentials of the anatomic diagnosis of the necropsy are:

Malignant nephrosclerosis of the kidneys — uremia;

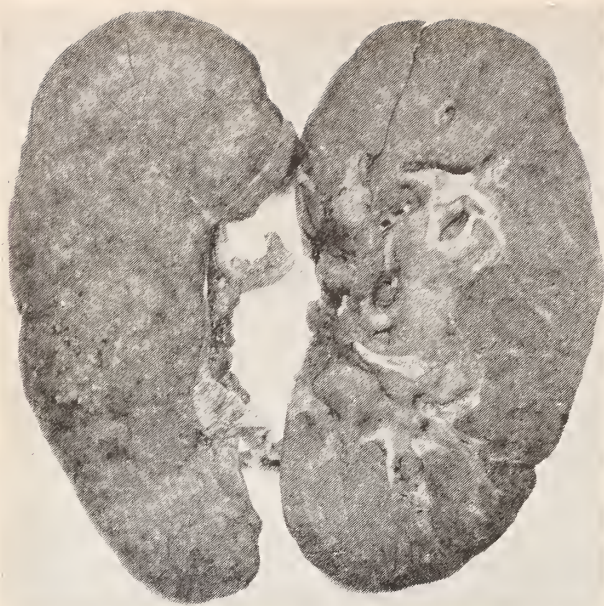


Figure 4. Malignant nephrosclerosis.

Acute fibrinous pericarditis;

Marked bronchopneumonia and fibrinous pleuritis of the lower lobe of the left lung;

Marked hyperemia and edema of the lungs;

Hemorrhagic catarrhal tracheitis and bronchitis;

Marked hemorrhagic urinary cystitis.

The body of this negress weighed 71 pounds and was 147 cms. long. The left pleural space contained about 50 cc of a turbid fluid, and the pleural surfaces had deposits of fibrin. The right pleural space had about 20 cc of yellow fluid. The pericardial sac contained a small amount of turbid yellow fluid; the pericardium

and epicardium were covered by a shaggy fibrinous exudate. The heart with 2 cms. of aorta and pulmonary artery weighed 330 gms. The valvular structures had no significant changes, the myocardium of the left ventricle was hypertrophied and had small focal scars. The aorta and its main branches including the coronary arteries had a moderate atherosclerosis. The suprarenal glands weighed 8 and 9 gms. respectively. Each kidney weighed 100 gms. The capsule stripped with difficulty from a granular and scarred red-brown surface with mottlings of yellow fatty changes. (Figure 4) The cortex was reduced to 4 or 5 mms. and the cortical markings were modified. The liver weighed 1000 gms. and had slight fatty changes, passive hyperemia and cloudy swelling. The right lung weighed 390 gms., the consolidated left lung 660 gms. The right had hypostatic edema and hyperemia, the left had these changes and foci of bronchopneumonia. The histologic changes of the kidneys were those of a severe arteriolar nephrosclerosis.

COMMENT

The illness of this patient follows the pattern of a chronic hypertensive disease in which the functions of the kidneys are impaired until finally death results from uremia. The various clinical observations and laboratory tests gave ample warning of this process. The necropsy disclosed contracted nephrosclerotic kidneys, the acute pericarditis of a uremic state, the hypertrophied myocardium and the moderately severe atherosclerosis of the aorta.

U. OF C. NOW PUBLISHES "CANCER RESEARCH"

Cancer Research, a scientific journal reporting research directed toward the understanding and conquest of cancer, is being published at the University of Chicago by the University of Chicago Press.

The official organ of the American Association for Cancer Research, the Journal, is edited by Dr. Paul E.

Steiner, professor of pathology and cancer specialist at the University of Chicago.

The journal, written for physicians, surgeons, pathologists, chemists, biologists, endocrinologists, geneticists and others, publishes original cancer research and general reviews. Original laboratory and clinical research, chiefly experimental, are also featured in the journal.

Annual subscription rate is \$7, with single copies \$1. Inquiries should be directed to the University of Chicago Press.

NEWS OF THE STATE



BUREAU

Society News.—"The Anemias" was discussed by Dr. Paul Ross, pathologist of Ryburn King, St. Mary's and St. Margaret's Hospitals, before the Bureau County Medical Society at a dinner meeting, January 11. Mr. James C. Leary, Public Relations Counsel, Illinois State Medical Society addressed the society at the St. Margaret's Hospital, Spring Valley, December 14 on "Public Relations."

COOK

Historical Collection of Irving Cutter on Display.—The memory of Dr. Irving S. Cutter, former health editor of the Chicago Tribune, was honored December 15 in an exhibit of photographs and extensive biographical materials placed on display in the downtown campus library of Northwestern University Medical School. Dr. Cutter was dean emeritus of the school at the time of his death, February 2, 1945. The exhibit includes rare volumes from his private collection of early works on midwifery, and manuscripts of his original contributions in the fields of medical education and history.

Dr. Luckhardt Chosen Man of the Year.—Dr. Arno B. Luckhardt, professor of physiology at the University of Chicago School of Medicine, has been named 1947 Man of the Year by Phi Beta Pi professional medical fraternity. Dr. Luckhardt was the discoverer of ethylene gas as an anesthetic.

Personal.—Dr. Robert G. Bloch, professor of medicine, University of Chicago School of Medicine, has accepted appointment to the associate medical advisory board of the National Jewish Hospital at Denver.—Dr. Guy V. Pontius was reelected president of St. Luke's Hospital medical staff at the

annual meeting of staff members at the University Club. Vice president is Dr. Thomas J. Coogan. Dr. Roland P. McKay was named secretary and Dr. Arthur J. Coombs, treasurer.

Branch Meetings.—The North Shore Branch of the Chicago Medical Society devoted its January 4 meeting at the Edgewater Beach Hotel to "Do's and Don'ts" in various types of injuries. The following speakers participated: Dr. Adrien Verbruggen, Chicago; Dr. Vinton E. Siler, professor of surgery, University of Cincinnati College of Medicine and Dr. Derrick Vail, Chicago.—Dr. Willard O. Thompson, discussed "Uses and Misuses of Sex Hormones" before the Northwest Branch of the Chicago Medical Society, December 3.—Dr. Carlo Scuderi addressed the West Side Branch of the Chicago Medical Society, November 18 on "Low Back Pain from an Orthopedic Standpoint and Its Treatment." Dr. Scuderi was recently elected secretary of the regional fracture committee of the American College of Surgeons.

Clinical Section.—The Chicago Heart Association clinical section held a joint meeting with the members of the staff of Presbyterian Hospital and the University of Illinois College of Medicine, February 18 at the medical school.

"Hope for Hearts".—A new brochure entitled "Hope for Hearts" was recently released by the Chicago Heart Association. The attractive booklet contains an introduction on Heart Disease, a brief outline of the Chicago Heart Association and pertinent paragraphs on Rheumatic Fever, High Blood Pressure and Hardening of the Arteries and Coronary Thrombosis. The booklet concludes with a

discussion of the goal of the Chicago Heart Association in its campaign for funds to carry on research.

Dr. Coleman Honored.—At the annual meeting of the Institute of Medicine of Chicago on December 7, an illuminated parchment scroll was presented to Dr. George H. Coleman by the Board of Governors and officers as a tribute of appreciation for his outstanding contribution to the welfare of the Institute throughout twenty-five years of continuous service as secretary. Dr. Warren W. Furey, Dr. Eric Olbderg, Dr. Charles B. Puestow, and Dr. H. Prather Saunders were elected to the Board of Governors. Officers for 1949 are Dr. Henry T. Ricketts, chairman of the Board of Governors; Dr. William F. Petersen, vice chairman of the Board; Dr. Herman L. Kretschmer, president; Dr. Archibald L. Hoyne, vice president; Dr. George H. Coleman, secretary; Dr. Grant H. Laing, treasurer. Citizen fellowship was conferred on Miss Ella M. Salmonsens, medical librarian of the John Crerar Library, for her noteworthy contributions as medical librarian, compiler, and indexer.

Dr. John Bigler Named Acting Chairman of Pediatrics.—Dr. John Bigler has been named acting chairman of the department of pediatrics in the Northwestern University Medical School, Dr. J. Roscoe Miller, dean, announced December 21. Dr. Bigler replaces Dr. Stanley Gibson, who retired on December 1 from the chairmanship and as medical director of Children's Memorial Hospital, a Northwestern affiliate. Dr. Bigler has also become the hospital's medical chief.

A member of the Northwestern medical faculty since 1930, Dr. Bigler has been associate professor of pediatrics since 1944. He was educated at Rush Medical College, from which he received the M. D. degree in 1923.

Dean Miller also announced new appointments to the medical faculty. They are Dr. Paul Andrew Campbell, assistant professor of otolaryngology; Dr. Anna Hamann, assistant professor of radiology; and Dr. Robert Shrek, assistant professor of pathology.

Dr. Campbell, a member of the University of Illinois faculty until his appointment to Northwestern, has served as special consultant to both the Surgeon General of the United States and the Air Surgeon of the U. S. Air Force, and as chief consultant in otolaryngology to the Veterans Administration of Indiana, Illinois and Wisconsin. A member of many medical and other scientific societies, Dr. Campbell was educated at the University of Chicago and Rush Medical College.

A native of Hamburg, Germany, and a graduate of the University of Munich medical school, Dr. Hamann first became associated with an American institution in 1938, after holding several important radiology posts in Europe, when she joined the University of Chicago faculty. She became an American citizen in January, 1946, and is a member

of the American Medical Association and the Chicago and Illinois Medical Societies.

Dr. Shrek, since 1941, has been chief of the Tumor Research Unit of Hines Veterans Administration hospital. He served as a medical corps major from 1942 to 1944, and has been assistant pathologist at Hines and as assistant in pathology at Yale University.

Special Lectures.—The twenty-fifth Lewis Linn McArthur Lecture of the Frank Billings Foundation will be delivered at the Palmer House on Friday evening, March 25 by Dr. Warren H. Cole, professor and chairman of the department of surgery, University of Illinois College of Medicine. The sixth Frank Billings Lecture will be delivered at a joint meeting with the Society of Medical History of Chicago at the Palmer House, Friday evening, February 25, at 8 p. m. In commemoration of the William Osler centennial, Dr. John F. Fulton, Sterling professor of physiology, Yale University School of Medicine, will discuss "Osler as a Humanist."

The Berkelhamer Scholarship.—Robert Leevack, 336 McKinley St., Gary, Ind., has been awarded the Ralph C. Berkelhamer scholarship for 1948-1949 at the University of Illinois College of Medicine.

Announcement of the awarding of the scholarship, which represents a gift of \$100, was made recently by Dr. John B. Youmans, dean of the College of Medicine. Leevack is a senior at the University.

The scholarship was established two years ago by the Berkelhamer family, 3945 W. Jackson Blvd., Chicago, in honor of the late Dr. Ralph C. Berkelhamer. Dr. Berkelhamer was taken prisoner by the Japanese at Bataan, and perished when his prison ship bound for Japan was sunk by submarine action in the South China Sea in October, 1944.

Students who have completed at least one year in the College of Medicine are eligible for the scholarship. The Berkelhamer family has stipulated that the scholarship may be awarded "to any needy and deserving student, with no prejudice as to race or religion."

Medical Economics Survey by Evanston Hospital.—Despite the increased cost of living, more people in the North Shore area can afford medical and hospital care today than ever before, as indicated by figures just released by Evanston Hospital. Visits to the hospital's Outpatient Department, which serves as a clinic for those seeking medical care without hospitalization, have decreased approximately 30 per cent in the past ten years, after hitting a peak in 1939. At the same time, occupancy of beds at the hospital has continued to rise, severely taxing the hospital's facilities, which have expanded little during the past decade.

This shift in demand, declared Roy W. Walholm, executive vice president of Evanston Hospital, is due to higher incomes, more widespread membership in hospital insurance plans and increased recognition of the benefits of hospital care.

The figures below show the visits to the Out-patient Department during the past ten years:

Year	Total Visits	Year	Total Visits
1937	21,788	1943	20,607
1938	23,409	1944	18,712
1939	31,039	1945	16,362
1940	29,555	1946	15,161
1941	30,446	1947	14,864
1942	26,448		

Research at Illinois.—Three research grants in the amount of \$16,869 have been awarded to the University of Illinois' Colleges of Medicine and Dentistry.

The U. S. Public Health Service has renewed a grant in the sum of \$6,580 for continuance of studies on cardiac output. The studies are being conducted by the department of physiology, under the supervision of Dr. R. C. Ingraham.

U. S. P. H. S. also has awarded a grant of \$2,943 for a research project on facial growth after removal of the mandibular condyle. The study will be conducted by the College of Dentistry, under the supervision of Dr. Bernard G. Sarnat.

Eli Lilly and Company, Indianapolis, Ind., has awarded a \$5,346 grant to the College of Medicine for research on mumps vaccination. The project will be conducted under the joint direction of Dr. J. E. Kempf and Dr. Ralph Spaeth.

Mercy Alumni Choose New Officers.—At the second annual homecoming celebration of former Mercy Hospital internes, November 13, Dr. Arkell M. Vaughn, senior surgeon of the Mercy staff, was named president. Other officers are Dr. Norbert C. Barwasser, Moline, vice president; Dr. Cornelius M. Annan, secretary and Dr. John B. Condon, treasurer. The retiring president, Dr. George G. O'Brien, was named to the newly created executive board. This board will be made up of past presidents. Dr. O'Brien being the first to serve as the internes' president, is the first appointed to that group, the Alumni having just been organized last year.

Society News.—Dr. Frank H. Merryweather, regional medical director, Federal Security Agency, Region 5, addressed the Chicago Council on community Nursing, January 17 on "The Hospital Construction Act; Its progress in Illinois and Effect on Nursing Needs."

Yarros Scholarship Awarded.—Rudolf E. Wilhelm, 529 Grant Place, Chicago, has been awarded the Rachelle S. Yarros scholarship for 1948-49 at the University of Illinois College of Medicine. Wilhelm is a sophomore.

The scholarship carries a stipend of \$500. Needy and deserving students in the College of Medicine are eligible for it.

The scholarship fund was established at the University of Illinois last spring by Victor S. Yarros of

La Jolla, Cal., husband of the late Dr. Rachelle S. Yarros.

Dr. Yarros taught obstetrics and social hygiene at the University of Illinois prior to her retirement in 1938. She held the rank of professor.

Hamblen Gives Bacon Lecture.—The Charles Summer Bacon lecture for 1948-49 was delivered at the University of Illinois, 1853 West Polk Street, Chicago, in Room 221, on February 23, 1949. E. C. Hamblen, M.D., Associate Professor of Obstetrics and Gynecology and Clinical Professor of Endocrinology, Duke University, had "Postpubescent Amenorrhea" as his subject.

Announce Research Associates.—At the annual meeting of the Hektoen Institute for Medical Research of Cook County Hospital, the following persons were appointed as research associates on the staff of the Institute: Drs. Ernest Loeffler, Bruno Volk, Fenton Schaffner, Jerome Swarts, and Joseph Silverstein.

CRAWFORD

Dr. Illyes Honored.—Dr. L. R. Illyes, Palestine, was presented with the emblem and certificate signifying his membership in the Fifty Year Club of the Illinois State Medical Society at a meeting of the Crawford County Medical Society in Robinson, December 16. The presentation was made by Dr. Harlan English, Danville. Dr. Illyes practiced for a while in Heathsville before moving to Palestine.

DE WITT

Personal.—Dr. W. M. Talbert, health superintendent of District No. 11, Illinois State Department of Public Health, has been named acting director of the De Witt-Piatt County Health Unit. He will retain his position as health superintendent of District No. 11. The appointment was made following the resignation of Dr. Corrine S. Eddy as director of the unit, a position she held since the bi-county unit began operation in November, 1947.

GREENE

Society Election.—On December 10, Dr. Paul A. Dailey, Carrollton, was chosen president of the Greene County Medical Society at a meeting in Roodhouse. Other officers are Dr. E. G. de Quevedo, vice president; Dr. F. Earl Walker, secretary-treasurer and Dr. A. K. Baldwin, censor. Dr. A. D. Wilson, Carrollton, was named county chairman of civilian defense. Dr. W. H. Garrison, who is the out going secretary of the county medical society, expressed his appreciation for the splendid spirit and cooperation of the members of the society during his twenty-four years of service, one year of which was spent as vice president, three years as president and twenty years as secretary. Dr. Warner H. Newcomb, Jacksonville, addressed the meeting on "Antibiotics."

HENRY

Staff Meeting.—Dr. R. E. Herrmann, Bradford, was elected president of the St. Francis Hospital staff at a recent meeting. Dr. J. C. Crisp, Toulon, was named vice president; Dr. E. J. Goetzman, Kewanee, secretary. Dr. C. Paul White, secretary of the Henry County Medical Society, gave a report on "Compulsory Health Insurance" and a resume of conditions in England. Dr. Thomas B. Carney discussed the "Atomic Bomb."

KANKAKEE

Society Election.—At a recent meeting of the Kankakee County Medical Society, the following officers were elected: Dr. Paul H. Anthony, president; Dr. V. J. Kelly, vice president; Dr. A. L. Nickerson, secretary-treasurer; Dr. Robert Bedard, delegate to the Illinois State Medical Society and Dr. Albert Nehf, alternate.

KANE

Society News.—Dr. Howard E. Gillette, Aurora, discussed "Unerrupted Molar Teeth and Their Significance in Medicine and Dentistry," before the Aurora Medical Society, December 2. Dr. Charles Brobst was chosen president of the society at this meeting to succeed Dr. Myron E. Larson. Other officers include Dr. Robert A. Milroy, vice president and Dr. John E. Marks, secretary-treasurer.

Roscoe Miller Honored.—Dr. James Roscoe Miller, dean of the Northwestern University Medical School, and president-elect of the university, was guest of honor at a reception and dinner at the St. Charles Country Club, December 21, given by Lester J. Norris, St. Charles, trustee of the university for the past thirteen years.

KNOX

Society News.—The Knox County Medical Society and the Knox County Bar Association met jointly at a meeting in Galesburg, December 16. The principal address was given by Mr. William Holloway Jr., Chicago, director, Bureau of Legal Medicine and Legislation, American Medical Association, on "Legal Medicine and Its Relationship to the Profession."

LAKE

New Officers.—Dr. Mercer T. Brown, Zion, was elected president of the Lake County Medical Society, December 14, to succeed Dr. M. D. Penny, Libertyville. Other officers named at the annual election meeting in the Lake County Tuberculosis Sanatorium were Doctors S. P. Kaiz, vice president; John L. Ward, Lake Bluff, secretary and William R. Darnall, treasurer. The society also went on record in favor of the Blue Shield plan as adopted by the Chicago Medical Society recently.

MACON

New Officers.—At a meeting of the Macon County Medical Society, December 3, a unanimous vote was cast for the officers proposed by the nominating committee headed by Dr. Art'ur C. Simon. The elected officers are Dr. Vernon M. Long, president;

Dr. Hyman J. Burstein, president elect; Dr. Maurice D. Murfin, secretary; Dr. Chester T. Johnson, treasurer; Dr. Arthur F. Goodyear, delegate to the Illinois State Medical Society and Dr. Murfin, alternate.

Hospital Staff Elects Officers.—Dr. J. Jack Brown, Decatur, was recently elected president of the Decatur and Macon County Hospital staff succeeding Dr. F. G. Irwin. Dr. Dwight A. Pence was elected vice president and Dr. Herbert J. Bavor was named secretary-treasurer.

MARION

Society Election.—The Marion County Medical Society at its recent meeting installed the following officers: president, Dr. M. T. Horsman, Salem; vice president, Dr. H. E. Snow, Centralia; secretary-treasurer, Dr. Max Hirschfelder, Centralia. A movie, "The Physiology of Normal Menstruation," was shown to a large group of doctors who attended the dinner meeting at the Elks' Home.

MC LEAN

Society News.—Dr. B. M. Kagan, director of pediatric research, Michael Reese Hospital, addressed the McLean County Medical Society, December 14, on "Practical Approach to Problems of Fluid Balance."

MORGAN

Hospital News.—At the regular executive staff meeting held December 14 at Our Saviour's Hospital, Jacksonville, the following officers were elected: Dr. E. D. Canatsey, president; Dr. V. T. J. Lenth, vice president; Dr. P. B. Hartley, secretary; Dr. A. M. Paisley, dean of training school; board of censors, Doctors Lenth, Hartley and F. Garin Norbury. The election followed the annual Christmas dinner for members of the medical staff given by the Sisters of the Holy Cross of the hospital. About thirty doctors attended.

OGLE

Personal.—Doctor and Mrs. J. Alba Johnston, residents of Byron for the past fifty-one years, observed their sixty-second wedding anniversary, December 23. Dr. Johnston is a former president of the Ogle County Medical Society and served twelve years on the Byron board of education, holding the position of president and clerk of the board.

ROCK ISLAND

Society Seeks Charter for Insurance Plan.—The Rock Island County Medical Society applied December 17 to the State of Illinois for a charter to incorporate a Rock Island County Medical service, a prepayment, voluntary medical system now in effect in Iowa. Dr. D. B. Freeman, Moline, president of the non-profit corporation, stated that the society approved the plan because it is more efficient, less expensive and generally more protective than the compulsory medical service plan being discussed by the federal administration.

Society Election.—Dr. Norbert C. Barwasser, Moline, was elected president of the Rock Island

County Medical Society at its annual meeting, December 14. He succeeds Dr. Bruce Collins, Rock Island. Dr. S. P. Durr, Rock Island, was named first vice president and Dr. George Cook, East Moline, second vice president. The reelected officers were Dr. J. G. Gustafson, Moline, secretary and Dr. Phebe Pearsall, Moline, treasurer.

ST. CLAIR

Society Election.—Dr. Herman J. Nebel, East St. Louis, is the new president of the St. Clair County Medical Society, succeeding Dr. W. C. Scrivner, East St. Louis. The society has elected Dr. J. E. Wheeler, Belleville, as president elect to succeed Dr. Nebel next year. Serving with Dr. Nebel for the ensuing year are Dr. Francis E. Bihss, vice president; Dr. Owen J. Eisele, reelected secretary, and Dr. Harold McCann, reelected treasurer. Dr. R. C. Heligenstein, Edison Place, was elected president of the Belleville branch of the St. Clair County Medical Society at the annual meeting December 14, at the Schwarztrauber Cafe. Dr. H. P. Dexheimer is the retiring president. Other officers elected at the meeting include Dr. G. C. Otrich, president elect; Dr. C. P. Renner, vice president; Dr. H. L. Lange, treasurer and Dr. Irwin W. Davis, secretary.

VERMILION

Staff Election.—Dr. E. M. Dewhirst was elected president of the Lake View Hospital medical staff at the annual meeting December 14. He moved up from the vice presidency to succeed Dr. O. J. Michael. Dr. A. R. Brandenberger was elected vice president and Dr. M. R. Warden was reelected secretary-treasurer. Dr. D. L. Dickerson discussed "Brain Tumors" and Dr. Holland Williamson, Danville, newly elected president of the Vermilion County Medical Society, led a discussion of the National Compulsory Health program.

WILL-GRUNDY

Society Election.—Dr. D. W. Killinger, Joliet, was elected president of the Will-Grundy County Medical Society at its annual meeting December 9 at the Hotel Louis Joliet. He succeeds Dr. Joseph Zalar, the retiring president. Dr. John Roth, Morris, was elected vice president; Dr. Philip McGinnis, secretary-treasurer and Dr. Andrew G. Bustin, sergeant-at-arms. The delegates elected to the Illinois State Medical Society were Doctors Bernard Klein and Vaheh Seron.

WINNEBAGO

Society News.—Dr. Carl Steinhoff addressed the Winnebago County Medical Society December 14 on "Atomic Medicine."

HEALTH DEPARTMENT ACTIVITIES

Radio Programs.—Special 15-minute radio programs on venereal disease are being broadcast over Station WLPO in LaSalle every Friday at 1:30 P. M., Dr. Roland R. Cross, Illinois director of public health, announced December 8.

Sponsored jointly by the state department of public health and the Hygienic Institute of LaSalle, Peru and Oglesby, these broadcasts are in line with the National program of radio education in venereal disease, designed to uncover hidden sources of these infections. Station WLPO is the first in Illinois to present this health program as a public service, Dr. Cross said.

The transcriptions, which are available through the Illinois department of public health to any radio station in the State, have been prepared by Columbia University and the U. S. Public Health Service. Famous stars of screen and stage, as well as commentators and script writers of national reputation, have contributed their efforts to this undertaking.

The positive benefits of early detection and proper treatment of venereal disease will be featured throughout the broadcasts. With a script prepared under the supervision of the joint religious radio committee, moral issues involved in venereal disease control will also be emphasized.

"The theme of these broadcasts is not fear but hope — the promise of a normal happy life for venereal disease sufferers who receive adequate treatment," Dr. Cross concluded.

GENERAL

Charles Huggins Honored.—Dr. Charles B. Huggins, professor of urology and chairman of the University of Chicago committee on cancer, was one of six internationally known scientists awarded the Francis Amory prize of the American Academy of Arts and Sciences, it was announced recently.

The \$21,000 septennial prize for outstanding work with reference to the alleviation or cure of men's urological disorders was first awarded in 1940.

Dr. Huggins, who received one of the six \$3,500 awards, was honored for his development of the treatment of prostatic cancer by suppression of the male sex hormone by surgical operation and by the use of estrogens.

Dr. Huggins, discoverer of the first chemical test to detect the presence of a form of cancer (prostatic), was recently awarded the third annual award of the American Urological Association for research in the human male reproductive tract. He has also received the Gold Medal of the Congress of the Societe Internationale d'Urologie, the Charles L. Mayer prize of \$2,000 of the National Academy of Science and the Katherine Berkan Judd prize of \$1,000.

Other recipients of the 1948 prize are: Dr. S. A. Waksman of the New Jersey State Agricultural Experimental station; Dr. G. A. Papanicolaou of Cornell Medical College; Dr. A. B. Gutman of Presbyterian Hospital, New York City; Dr. W. J. Koff of Holland; and Dr. G. F. Marian of Scotland.

Dr. Huggins is the second University of Chicago recipient of the award. Carl R. Moore, professor and chairman of the department of zoology, received the award in 1940.

Officers of the United States Chapter of Surgeons.—The following officers were chosen at a recent meeting of the United States Chapter of the International College of Surgeons: Dr. Henry W. Meyerding, Rochester, Minn., president elect; Dr. William Randolph Lovelace, Albuquerque, New Mex., first vice president; Dr. Arnold Jackson, Madison, Wis., secretary and Dr. Oscar B. Nugent, Chicago, treasurer. Dr. Custis Lee Hall, Washington, D. C., is the president.

New Head of Dixon Hospital.—Dr. Louis Belinson, for twelve years in the service of the State Department of Public Welfare, has been named acting superintendent of Dixon State Hospital, filling the vacancy caused by the death of Dr. Warren G. Murray.

Welfare Department Statistics.—The resident population in all institutions of the Department of Public Welfare, October 31, 1948, was 47,613 an increase of 1,521 over October 31, 1947. On the books of all institutions, including those present, in family care, conditional discharge and all other absences, were 53,964.

The greatest increase over October of last year was in the nine hospitals for the mentally ill in which the population rose 1,442. There were 1,108 admissions, 726 discharges and 286 deaths during the month. In the hospitals were 34,508 patients and a total of 38,013 on the books.

The institutions for the mentally defective Dixon State Hospital and Lincoln State School and Colony showed an increase of 218 over the previous year. The resident population was 9,335 with 10,596 on the books.

There were 361 in Security Hospital. At Neuropsychiatric Institute, where most admissions are temporary for special treatment, 70 patients were present at the month's end.

At clinics for trachoma control and prevention of blindness in Southern Illinois, 224 received treatment for trachoma, 57 for glaucoma and 519 for other eye ailments. Seven were hospitalized for operations.

The Chicago Community Clinic reported 603 interviews. Of these, 591 were former state hospital patients, 278 at Elgin and 224 at Manteno.

The Eye and Ear Infirmary listed 19,410 treatments in October, and 384 persons were admitted to the hospital.

Welfare Institutions reported 1,805 new dental cases and 5,598 old dental cases for October.

Heart Symposiums.—The third and fourth of the 1948-1949 symposiums on heart disease sponsored by the Illinois Heart Association, as a part of its program of professional education, were held in Joliet, January 26 and in Alton, February 3. The Joliet program was held at the Louis Joliet Hotel. The afternoon program included the following

speakers: Dr. Chester Kurtz, professor of cardiology, University of Wisconsin Medical School, on "Rheumatic Heart"; Dr. William E. Anspach, Chicago, "X-ray Diagnosis in Heart Disease"; and Dr. Willis J. Potts, associate professor of surgery, Northwestern University Medical School and surgeon-in-chief, Children's Memorial Hospital on "Surgery of Congenital Heart Disease." A panel discussion, participants in which were Doctors Sidney Strauss and Don C. Sutton, both of Chicago, followed the afternoon presentations. The principal speaker at the evening dinner meeting was Dr. Geza de Takats, clinical associate professor of surgery, University of Illinois College of Medicine; chief, surgical staff, St. Luke's Hospital; and senior consultant, Great Lakes Naval Hospital, Great Lakes. Dr. de Takats discussed "Surgical Treatment of Hypertension."

Dr. Edward Cannady, Jr., East St. Louis, is chairman of the Illinois Heart Association's Educational Committee which arranges for the symposia. Dr. Lewis W. Woodruff was responsible for the Joliet meeting. Dr. Robert Elliott was in charge of arrangements for the Alton meeting.

Evening Postgraduate Courses.—An evening postgraduate course of six lectures on the temporomandibular articulation will be offered by the University of Illinois College of Dentistry beginning Wednesday, March 23.

Dr. Bernard G. Sarnat, head of the department of oral and maxillofacial surgery, will be in charge of the course entitled "Oral Surgery II—The Temporomandibular Articulation." It will be offered over a period of six successive Wednesdays from 7:30 to 9:30 p.m.

The subject matter will include anatomical, physiological, and pathological considerations of the temporomandibular articulation as well as problems in surgical and non-surgical treatment of these conditions. The final session will be devoted to a round table discussion.

This course will be of value to physicians in general practice, oral and maxillofacial surgeons, and otolaryngologists.

The faculty will be composed of: Harry Sicher, M.D., Professor of Anatomy and Histology, Loyola University Dental School, Chicago; Joseph P. Weinmann, M.D., Associate Professor of Histology, University of Illinois College of Dentistry; Arnold A. Zimmermann, M.D., Professor of Anatomy, University of Illinois College of Medicine; Francis L. Lederer, M.D., Professor and Head of the Department of Otolaryngology, University of Illinois College of Medicine; Allan G. Brodie, D. D.S., Ph.D., Professor and Head of the Department of Orthodontia, University of Illinois College of Dentistry; John Thompson, D.D.S., M.S., Professor and Head of the Department of Orthodontia, Northwestern University Dental School, James Bar-

rett Brown, M.D., Associate Professor of Clinical Surgery, Washington University School of Medicine, St. Louis; James B. Costen, M.D., Associate Professor of Clinical Otolaryngology, Washington University School of Medicine, St. Louis; Bernard G. Sarnat, M.D., D.D.S., Professor and Head of the Department of Oral and Maxillofacial Surgery, University of Illinois College of Dentistry.

Further information may be secured by writing to Dr. Bernard G. Sarnat, University of Illinois College of Dentistry, 808 S. Wood Street, Chicago 12, Illinois.

MARRIAGES

DR. SAMUEL JOSEPH GOLDBABER, Joliet to Miss Alice Ehrenberg, Joliet, recently.

DEATHS

FRANK WESLEY ALLIN, Chicago, who graduated at Rush Medical College in 1905, died December 28, aged 79. He had practiced medicine in Chicago for 40 years; formerly, assistant clinical professor of pediatrics at Rush Medical College.

JOSEPH HENRY BLOMER, Quincy, who graduated at Rush Medical College in 1906, died December 2, aged 68. He had practiced medicine in Quincy since 1908.

FRANK LOUIS BROWN, Chicago, who graduated at Chicago College of Medicine and Surgery in 1912, died December 7, aged 62. He had practiced medicine on Chicago's west side for 35 years.

ELMER E. CLARK, retired, Oakley, who graduated at Barnes Medical College, St. Louis, in 1898, was killed instantly December 1, when the automobile in which he was riding was struck by a train. He was 78.

JOHN W. DEVRY, retired, Elgin, formerly of Huntley, who graduated at Bennett College of Eclectic Medicine and Surgery, Chicago, in 1907, died December 11, aged 70.

HARRY W. FINK, Chicago, who graduated at Rush Medical College in 1921, died of a heart attack January 2 in Big Springs, Texas, as he was on his way to Arizona for a vacation. He was 53 years of age and had practiced medicine in Chicago for 25 years.

JAMES HENRY FITZBUTLER, Chicago, who graduated at Louisville (Ky.) National Medical College, Medical Department State University in 1896, and Illinois Medical College, Chicago, in 1904, died August 27, aged 75.

JULIUS ERNEST FLEISCHNER, River Forest, who graduated at University of Illinois College of Medicine in 1922, died December 26, aged 51. He had practiced medicine on Chicago's west side for many years.

GUSTAV A. FLORETH, Mount Olive, who graduated at St. Louis University School of Medicine in 1903, died December 23, aged 71.

FRANK EDWARD KIESLER, Chicago, who graduated at Loyola University School of Medicine in 1921, died December 8, aged 57.

MAE D. MCINNES-PAPPAS, West Frankfort, who graduated at Hering Medical College, Chicago, in 1912, died December 22, aged 59. She had practiced medicine in West Frankfort for 33 years.

WILLIAM THOMAS MCLEAN, retired, Maroa, who graduated at Rush Medical College in 1881, died in his home December 15, aged 90.

FRANCIS M. MARSTILLER, retired, Geneva, who graduated at Chicago Homeopathic Medical College in 1895, died December 5, aged 82. He had practiced medicine in Geneva since graduation from medical school.

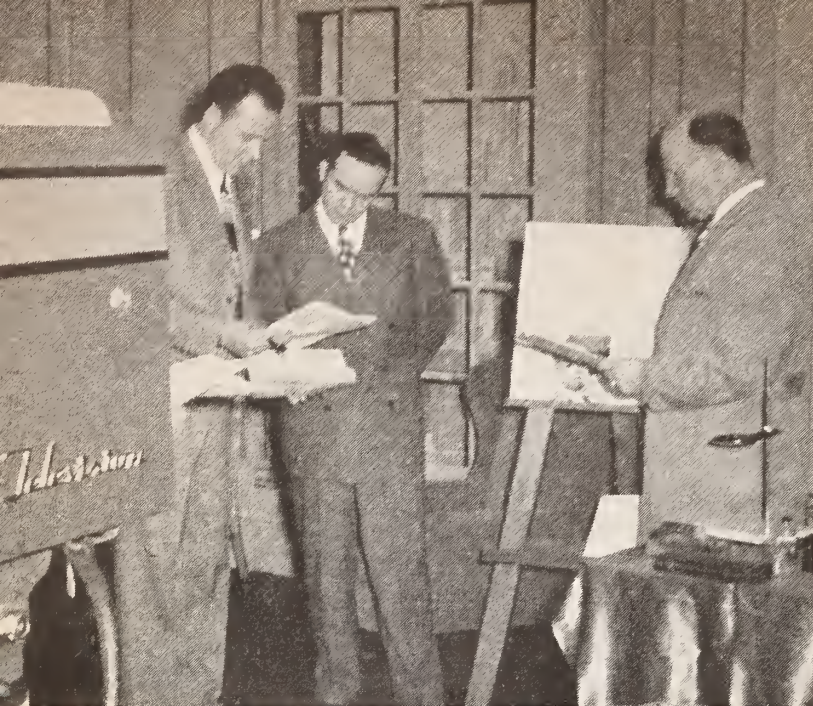
RICHARD A. ROCHE, Chicago, who graduated at Northwestern University Medical School in 1912, died December 26, aged 61.

MARION OUSLEY RUSSELL, retired, Chicago, who graduated at Hahnemann Medical College in 1893, died December 7, aged 89. She had practiced medicine on Chicago's south side for more than 50 years.

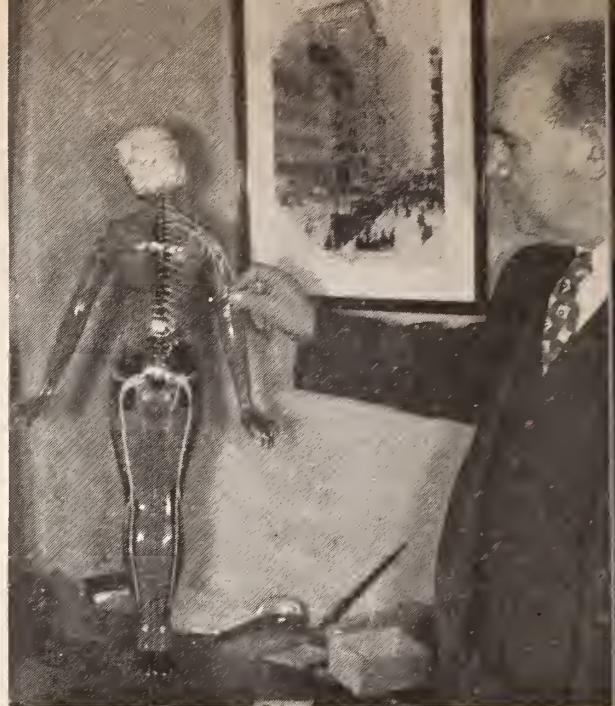
FRANK EDWARD SIMPSON, retired, Chicago, who graduated at Northwestern University Medical School in 1896, died December 13, aged 79, in Wesley Memorial Hospital. He was formerly clinical professor of dermatology at Northwestern University Medical School and president of the American Radium Society.

JOSEPH L. SOLDINGER, Chicago, who graduated at Loyola University School of Medicine in 1916, died December 18, aged 52.

WILLIAM H. STARR, Chicago, who graduated at the College of Physicians and Surgeons in St. Louis, in 1904, died December 16, aged 71. He had practiced medicine in Chicago for the last 30 years.



Mr. George Bauer, staff announcer for WGN-TV, Theodore R. Van Dellen and Harry M. Hedge run through their scripts prior to televising the latter's demonstration on the program titled "Birthmarks." Dr. Van Dellen acts as moderator for the programs. Philip



Lewin used a plastic model as well as a live model when his program called "What's Back of Your Backache" was televised. The programs which appear weekly are scheduled by Ann Fox, Secretary of the Educational Committee.

"For The Common Good"

HEALTH EDUCATION ON WGN-TV

That television is an expressive medium in visual health education has been demonstrated successfully in a series of programs launched as a public information feature by WGN-TV, in cooperation with the Educational Committee of the Illinois State Medical Society. Presented in playlet form, with narration interpolated by action and demonstrations of patients and equipment, each story thus far televised has met with remarkable public interest.

On December 16, "Diabetes—Under Control", featuring Dr. Henry T. Ricketts and Dr. Chester Coggeshall, both of Chicago, told the story of insulin and its part in increasing the life expectancy of the diabetic. Mrs. Maxine Sears, a young mother of two healthy children, born after her diabetic condition developed, appeared on the program. So did the two youngsters, Beverley, 2, and Karen 5. And George Dahlin, aged 10, showed that the diabetic injection is no problem, even to a child.

Dr. Theodore R. Van Dellen made his debut in the program on January 6, with Dr. Harry M. Hedge. With "Birthmarks" as the theme of the program, Dr. Hedge demonstrated the encouraging note that birthmarks need not be a problem by displaying a group of the instruments and mediums that are used in their successful removal. The program included the showing of photographs of two young patients before the correction was started. One of them, Master Edward Griebel, aged 10, was introduced to give truth to the statement that birthmarks need not be a permanent problem, since his had

been successfully removed some nine years previously.

"What's Back of Your Backache" was discussed in the January 13 program. Here Dr. Philip Lewin and Dr. Van Dellen brought forth the story of the average backache, the one found in the housewife, caused by fatigue and too much of doing the same thing like ironing, washing, scrubbing and just caring for her home and family. A plastic model was used to show the sites of the aching back, x-ray films revealed a normal straight back with frequent complaint of backache, and a curvature, with compensation, that had no trouble at all. A patient, Miss Mitzie Hunter, with a normal spine did exercises, such as bending and hip pivots, which could not be performed if some trouble were present. Braces and other equipment were also used on the program.

The same technic was used by Dr. Stanley Fahlstrom and Dr. Charles Dunham on the program, January 27, when they asked "Is Your Pain Arthritis?" Patients were again used and two charts showing a joint diagram and the exposition of the blood sedimentation test. With Dr. Van Dellen again acting as physician-moderator and showman Emcee, this program also told a story close not only to the patient, but to his doctor.

Talking about "The Murmur in Your Heart," February 3, Dr. Van Dellen and Dr. Chauncey Maher cooperated in expressing a cheerful note to the patient with heart disease. Three patients were used in this program, one with a normal heart sound, one a rheumatic fever patient, and one with auricular fibrillation. The new invention which amplifies heart sounds, the carthroscope, the electrocardiograph and x-rays were

employed to let the public know what goes on in the "inside" of medicine.

Selected at random from the mail received by WGN-TV, the following comments suggest that every individual is interested in the good health of himself and his family:

"I have just watched your program on diabetes and I am sure it is a wonderful way to inform the public about definite medical diseases. I like the way you put it on, so informal and natural, and with such terms that the layman could understand. Finally I liked the way Dr. Coggeshall told us not to worry too much if we find we are a diabetic' as it is no problem now with the use of insulin. I hope you continue these programs each week as they are a real program of education."

"The program on diabetes was very good. It was so helpful and educational. I hope we will see more programs in the near future."

"I wish to compliment you on the telecast Thursday afternoon on diabetes. I found it both interesting and instructive. I consider such programs a fine public service."

"Just to tell you how much I enjoyed the high type program by Dr. Hedge on birthmarks."

"I enjoyed the afternoon television programs very much on diabetes and birthmarks. Please continue."

"The programs on diabetes and birthmarks were very educational."

"I enjoy your afternoon program. I am also interested in the medical half hour that appears occasionally in your television matinee. I hope your program continues."

"I so enjoy your program. The dissertation and demonstration of birthmarks was very instructive. I wonder if you could have one on skin conditions in general I know that would be very much appreciated by many."

"The program on television interviewing Dr. Harry M. Hedge, dermatologist, was most interesting. I hope you can have more programs on medical subjects."

"Your program in the afternoon is greatly appreciated and enjoyed, especially the one on birthmarks. It was very educational."

One derogatory letter has been received at the time this story was written. It claimed that such programs would do harm and that the chart showing the life expectancy of the diabetic as compared with the period before insulin, was disheartening.

Visual health education brooks no competition apparently because these comments came from homes, restaurants and one liquor store. Other comments included:

"I made special arrangements to be home in time for your TV program 'What's Back of Your Backache.' I also brought a friend home (we have three teen-agers apiece) and we both were glad we made the effort as the program was very interesting. I hope it was the first of a long series. We'll be sure to be on hand for the next one on 'Arthritis.'"

"I enjoyed your television program on backache. I am troubled with this and the professor on the program gave several good pointers."

"The program on backache was very interesting. Hope this type of education continues."

It is possible that Illinois is the first state society with regularly scheduled television programs. We do not know if this is so, but the only way to find out is to claim it. We give our thanks to Jay Faraghan, program director of WGN-TV, Cosmo Genovese, producer, George Bauer, announcer, Bud Ellingham, floor director, and other members of the staff of WGN-TV for the splendid teamwork, courtesy and knowledge of their exacting business.

Lectures Arranged Through the Educational Committee of the Illinois State Medical Society; Charles P. Blair, Monmouth, Chairman; Warren W. Furey, Chicago, Vice Chairman:

W. W. Bauer, Director, Bureau of Health Education, AMA, Rotary Club of Maywood, January 13, Animal Experimentation.

Charlotte Babcock, Englewood Branch, Woman's Auxiliary, Chicago Medical Society, January 14, Know Yourself.

Morris Braude, B'nai B'rith Youth Organization in Chicago, January 19, on Mental Health in the Adolescent.

Rudolph Novick, Gage Park Woman's Club, in Chicago, January 25, on Growing Old.

Harold Miller, Chicago, Ninth District, Illinois Federation of Women's Clubs in Chicago, January 26, on National Compulsory Health Insurance.

Film for Dr. Matthew M. Steiner, When Bobby Goes to School.

Edward A. Piszczek, Chicago, St. Cecelia's Home and School Guild, in Chicago, February 1, Health and Hygiene.

Franklin Fitch, Chicago, B'nai B'rith Youth Organization, February 2, Education in Family Living.

Percy E. Hopkins, Chicago Woman's Aid Legislative Committee, in Chicago, February 7, on National Compulsory Health Insurance.

Leo Kaplan, Chicago, Physicians Fellowship Club Auxiliary, February 11, in Chicago, Growing Old Gracefully.

Margarete M. Kunde, Chicago, B'nai B'rith Youth Organization, February 16, in Chicago, Good Health Habits in the Adolescent.

Mr. John W. Neal, Toman Public Library Forum, February 25 in, Chicago, National Compulsory Health Insurance.

Franklin Fitch, B'nai B'rith Youth Organization, March 2, in Chicago, Education for the Family Living (second lecture).

Mr. Ralph Rohweder, executive secretary, National Society for Medical Research, Woman's Auxiliary, South Chicago Branch, Chicago Medical Society, March 7, Animal Experimentation and the Work of the National Society for Medical Research.

Dr. William B. Raycraft, Oak Park, Guild of the Tabernacle Church of the Divine Infant in Westchester, March 7, Child Health and Emotional Adjustment.

Robert Hagan, Chicago, Ivanhoe Junior Woman's Club in Chicago, March 8, on Childhood Disorders: Physical and Mental.

Harold E. Davis, Chicago, Public Health Chairman, Illinois Federation of Women's Club in Chicago, March 14, on What You Should Know About Cancer.

Harry E. Mantz, Alton, Mount Vernon Federated Woman's Club in Mount Vernon, March 15, on Heart Disease, illustrated.

Charles D. Krause, Chicago, Clearing Woman's Club in Chicago, March 15, on Child Health and Family Welfare.

Gilbert H. Marquardt, Chicago, Park Manor Woman's Club in Chicago, March 15, Problems of Growing Old.

Norman B. Dobin, Palos Park Woman's Club, March 24, in Palos Park, Mental Health.

Herbert Rattner, Chicago, Young Mothers' Club of Bryn Mawr in Chicago, March 28, on Skin Diseases of Infants and Children.

Lectures Arranged Through the Scientific Service Committee of the Illinois State Medical Society; Robert S. Berghoff, Chicago, Chairman; Louis Limarzi, Chicago, Vice Chairman:

N. Louis Campione, Chicago, Kankakee County Medical Society in Kankakee, January 14, on Treatment of Diabetes.

Eugene Hamilton, Chicago, Effingham County Medical Society in Effingham, January 20, on Fractures of the Ankle, illustrated.

Walter Mayne, Chicago, McDonough County Medical Society in Macomb, January 28, on

Treatment of Injuries to the Face and Mouth.

Leonard Jourdenais, Evanston, Henry County Medical Society in Kewanee, February 10, on Diabetes.

Sidney Portis, Chicago, Kankakee County Medical Society, in Kankakee, February 11, on How Should the Medical Man Handle Psychosomatic Problems.

Walter Mayne, Chicago, Effingham County Medical Society in Effingham, February 17, Treatment of Injuries to the Face and Mouth.

William J. Gillesby, Effingham, Marion County Medical Society in Centralia, February 17, on Varicose Veins.

C. Edward Stepan, Chicago, La Salle County Medical Society in La Salle, January 13, on Rheumatic Fever; Its Possible Etiology and Therapy.

Chester Coggeshall, Chicago, McDonough County Medical Society, in Macomb February 25, on Modern Conceptions of Diabetes Mellitus.

Howard L. Alt, Chicago, Will-Grundy County Medical Society in Joliet, March 10, Pathogenesis, Diagnosis and Treatment of Iron Deficiency Anemias.

John Bellows, Chicago, Kankakee County Medical Society, March 11, in Kankakee, Senile Changes in the Crystalline Lens and the Senile Cataract.

Walter Stevenson, Quincy, Tri County meeting of Marion, Washington and Clinton Counties, March 17, in Centralia, Remarks as President-Elect, Illinois State Medical Society, and Squint—A Social and Economic Problem.

Gerald M. Cline, Bloomington, Logan County Medical Society in Lincoln, March 17, on Rheumatic Fever.

Lindon Seed, Chicago, Will-Grundy County Medical Society in Joliet, March 24, on Acute Abdominal Emergencies with Special Reference to X-Ray of the Abdomen.

James Graham, Springfield, Marion County Medical Society, January 20, in Centralia, Physiologic Sequelae of Surgery on the Stomach, Gallbladder and Pancreas.

The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

**EDITOR — Harold M. Camp. EDITORIAL BOARD — James H. Hutton, Chairman,
Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher,
Harry Culver, Walter Stevenson, Raymond W. McNealy.**

Vol. 95, No. 3



March, 1949

RURAL HEALTH CONFERENCES

The Illinois State Medical Society sponsored two conferences on Rural Medical Service held at Mt. Vernon and Peoria, January 20 and 21, respectively. Although the weather was bad and the roads icy, the attendance at both conferences was most satisfactory. At Mt. Vernon, there were approximately 135 present, including many heads of county Farm and Home Bureau organizations, with a few county officials and members of boards of supervisors.

Four general subjects were scheduled on the Mt. Vernon program:

1. "Tuberculosis, What Can Be Done About It and What It Costs"

Ben D. Kiningham Jr., Executive Secretary, Illinois Tuberculosis Association, Springfield

A. T. Cole, M.D., Clinical Director, Outlook Sanatorium, Urbana

Clifton Hall, M.D., Chief, Tuberculosis Division, Illinois Department of Public Health, Springfield

2. "The Hospital Construction Act, Why and Where the Locations of Hospitals"

Roland R. Cross, M.D., Director, Illinois Department of Public Health, Springfield

George Hendrix, Chief, Division of Hospital Construction and Services, Springfield

George Weber, Assistant Chief, Division of

Hospital Construction and Services, Springfield

D. T. Bunting, Hospital Board, Fairfield

Frank Johnson, Planning Board, Mt. Carmel

3. "The Opportunities in Medicine and the Professions Allied with Medicine"

Harry M. Hedge, M.D., Chicago

Leonard J. Murphy, M.D., Chicago

Mrs. Mary Falk Bleeker, R.N., Chicago

4. "Compulsory Health Insurance, What It Costs and What You'll Get"

Ralph H. Blodgett, Ph. D., Professor of Economics, University of Illinois, Urbana

Harlan English, M.D., Danville

John W. Neal, Attorney, Chicago

Two of the above subjects were scheduled for the morning session, with the registrants for the session divided into two sections. The other subjects were scheduled for the afternoon session, with the same arrangement. For the closing session there was a general assembly with all present in attendance, and a summary of each of the individual sessions was heard. Following each presentation during the conference a sufficient amount of time was allocated for questions and answers, and this proved to be of great interest to all those present.

The Illinois State Medical Society as host, furnished a fine luncheon at the Hotel Emmerson, where the sessions were held. Dr. Percy E.



At the Rural Health Conference in Peoria 150 representatives of farm organizations heard H. Prather Saunders of the American College of Surgeons, John A. Rogers, of the American Cancer Society and G. Howard Gowen of the Illinois Department of Public

Health discuss "The Cancer Problem, What Can Be Done About It?"

The success of the two conferences makes it probable that they will be scheduled annually.

Hopkins, president, Illinois State Medical Society, gave the opening address in the morning and likewise presided at the luncheon.

The Peoria conference held at the Pere Marquette Hotel, likewise had the same four basic subjects scheduled on the program, with two additional subjects scheduled and had three conference rooms for the morning and afternoon sessions. The additional basic subjects and speakers were as follows:

1. "The Cancer Problem, What Can Be Done With It?"

John A. Rogers, M.D., Executive Director, Illinois Division, American Cancer Society, Chicago

H. Prather Saunders, M.D., Associate Director, American College of Surgeons, Chicago

G. Howard Gowen, M.D., Chief, Division of Cancer, Illinois Department of Public Health, Springfield

2. "County Health Departments, What They Cost And What They Can Do"

Charles F. Sutton, M.D., Chief, Division of Local Health Administration, Illinois Department of Public Health, Springfield

Everett P. Coleman, M.D., Member, Fulton County Board of Health, Canton

L. L. Vitt, M.D., Health Officer, Fulton

County, Canton

Mrs. Daisy Jacobs, Health Educator, Peoria County Health Department, Peoria

Miss Clara R. Brian, Member, McLean County Health Board, Bloomington

Dr. Percy E. Hopkins again presided at the opening session, welcoming the guests who came over icy roads to be present at the conference. He likewise presided during the luncheon. There were approximately 150 at this conference representing many farm groups from many counties in central and northern Illinois.

The section in the afternoon which heard the discussions on compulsory health insurance was well attended, and they heard a fine presentation. Doctor English opened the discussion, outlining the present efforts to get a compulsory health insurance system in operation, as the beginning of a well planned expansion of the social security functions of the government.

Ralph H. Blodgett, Ph. D., Professor of Economics at the University of Illinois, gave a most interesting and enlightening discussion of the proposal, discussing it from the standpoint of an economist. His paper follows this editorial. He did not favor such a plan, which would be expensive, and as he stated, would unquestionably lower the type of medical care patients would receive. Unlike many proponents of the plan,

he does not believe that because the family income is not in excess of \$3000 per annum, they are unable to procure adequate medical care, and pointed out the well known fact that perhaps more than 50% of the American people are in this income group, and he personally has not been convinced that any of them cannot receive high class medical care.

Doctor Blodgett likewise emphasized the fact that the planners venture an opinion as to the probable cost of the medical care provisions, yet they do not venture to estimate what the entire program would ultimately cost, and this is a vital consideration on the part of the working people who already have a generous portion of their income taken in the form of withholding and other taxes.

Mr. Neal discussed the Senate Bill No. 5 introduced by Senator Murray for himself, Senators Wagner, Pepper, McGrath, Taylor and Chavez on the first day in the present 81st Congressional Session that bills were received. He gave information concerning this bill, and some others which have been introduced in the Congress.

The question and answer period was most interesting, and many from the farm groups, as well as county and township officials, expressed their opinions of the proposals, and voiced their disapproval. The entire group was unanimous in the desire to have a brief summary of each of the talks sent to them as soon as possible after the conference was held, and this has been done.

Many present at these conferences expressed a desire that the State Medical Society will have similar conferences in the future, and they gave assurance that they would see that the attendance was much larger than at the 1949 conferences. The attendance, however, was very encouraging especially when the roads were completely covered with ice, and many had to drive through deep snow to be on hand when the conference started. One group of four from a county only 125 miles from Peoria spent more than five hours on the trip to the conference, but gave the assurance that it was well worth the effort and hazardous drive.

It is quite probable that the Illinois State Medical Society will make this an annual affair, and perhaps next year hold conferences on Rural Medical Service in several parts of the state, so those desiring to attend will have a shorter



Harlan English of Danville, Chairman of the Committee on Rural Medical Service was largely responsible for the success of the two conferences. The Illinois Agricultural Association has also been appreciative of his cooperative and aggressive spirit.

distance to drive, especially if the weather should not be favorable.

COMPULSORY SICKNESS INSURANCE

Ralph H. Blodgett, Ph.D.

**Professor of Economics, University of Illinois,
Urbana**

My observations of the operation of our economic system over the years has led to a conclusion which seems to be pertinent to the discussion of compulsory sickness insurance: That much of the evil which is done in our system is accomplished by people who set out to do good for great masses of our people.

It has been discovered by the exponents of compulsory sickness insurance that our country is suffering from a great shortage of doctors, dentists, nurses and medical personnel of all kinds, as well as of hospitals and other kinds of medical facilities. The remedy proposed is to have the federal government step in to sponsor

Presented at the Rural Health Conferences, Mt. Vernon and Peoria, January 20 and 21, 1949 respectively.

a great increase in medical personnel and facilities and then see to it that all persons who contribute to the scheme have free access to the personnel and facilities without regard to the level of income enjoyed by the contributors.

This proposal is a highly controversial one, and wide differences of opinion exist with respect to it. For example, Oscar Ewing, Federal Security Administrator, estimates that only 20 per cent of our people now have access to all the medical services which they need and want, so it would seem that 80 per cent of the people would benefit from compulsory health insurance. On the other hand, medical sources believe that the plan would actually bring improved medical service to not more than 10 per cent of the people, and perhaps to as few as 5 per cent.

In the time allotted me, I cannot begin to explore all the issues in the field. I must leave to others such questions as the quality of the medical service which participants might receive, how such doctor would care for some thousands of patients, and the effect on the important personal relationship between doctor and patient. My remarks will have to do with the cost of compulsory sickness insurance.

There is talk today of financing the scheme by means of a payroll tax of 3 or 4 per cent. But, if collected on the present social security basis, such a tax would yield only 3 or 4 billion dollars a year — a mere drop in the bucket. If both employers and employees paid 3 or 4 per cent on eligible payrolls, the present yield would be 6 or 8 billions of dollars, but this would be little more than the 6.5 billions dollars a year now spent privately on medical services. Of course, the yield would be somewhat greater if more people were included in the scheme for compulsory sickness insurance than are now included in other social security projects and if the tax were applied to the first \$4800 of wages, salaries, and income of the self-employed rather than to the first \$3000 of just wages and salaries.

But think of what taxes of this size would mean to you!

A tax of 4 per cent on payrolls, paid by both employers and employees, or 8 per cent altogether, would make a wage-salary income of \$4800 subject to a levy of almost \$400 a year for compulsory sickness insurance.

How would you like to prepay medical bills of around \$4000 over a ten-year period? Most

of you, I imagine, would fare far better than that in paying all your own medical bills privately. Of course, people with small incomes would receive as much medical service and pay far less, but this would be no help to the people who make decent incomes. This scheme is unlike that for old-age pensions, under which what you draw out depends on what you have paid in. Here you pay what is required of you and have as much access to medical services as you need.

Unfortunately, there is no guarantee that even an 8 per cent total tax on wages and salaries of eligible workers and incomes of self-employed persons would be enough to finance the plan for compulsory sickness insurance. How much the whole thing would cost would depend on how many people were included in the scheme, the number and kinds of medical services made available, the extent to which people made use of the system, the number of administration personnel required and the volume of abuses that developed. In England, the project for compulsory sickness insurance covers all of the people from the cradle to the grave and provides not only ordinary medical services and facilities but also such things as double sets of false teeth, spectacles or eye-glasses, wigs and toupees, and glass eyes, and our plan might eventually be extended just as far.

We might also find the old rationing psychology developing again. Some people used to buy coffee or shoes, whether they needed the products or not, rather than let ration stamps expire unused. Under compulsory sickness insurance, people might figure that, since they had paid for it anyhow, they might as well help themselves to the medical services they wanted and might spend quite a part of their time in doctors' offices.

Another factor affecting cost would be the number of administrative personnel required. Private sources estimate that the operation of the scheme would require some 6 or 7 other workers all told for each doctor employed. If 150,000 doctors get into the scheme, this would mean 900,000 to 1,050,000 other employees, and their wages and salaries would contribute quite a little to the total cost.

The volume of abuses that developed would be another factor affecting cost. How many people are there who would go to the doctor with a headache or stomachache, obtain a prescription,

go to the drugstore, discover that they had miraculously recovered, and ask the druggist if they might take a new lipstick or box of face powder instead of the article called for by the prescription? The druggist wouldn't care, since he could obtain the cost of the prescribed article from the government anyhow. How many people do we have who would like to be sick quite often and long if they could draw a sizable fraction of their usual wages from the government in sick benefits and also have all their medical expenses paid for them?

In England, according to a recent dispatch, they are discovering that compulsory sickness insurance is currently costing about five times the amount of the contributions collected from the people to finance the scheme. If we had a roughly similar experience here, the total cost of the project would reach some such astronomical figure as 30 or more billions of dollars per year. How would such expenditures be financed? Surely it would not be politically or economically feasible to levy payroll taxes of 15 or 20 per cent for the purpose. The answer is, I suppose, that the excess of expenditures over contributions of participants would be paid for out of general federal revenues, which means largely out of the proceeds of income taxation.

This calls attention to an important fact concerning compulsory sickness insurance and other forms of social insurance — the participants are supposed to get much more out of the schemes than they contribute directly. Insurance against practically all of the eventualities covered by social insurance can be obtained from private insurance companies, but it is objected by virtually everyone that most people cannot afford such insurance. How then can they afford insurance against the same risks through a governmental system? Unless one is willing to make the probably ridiculous assumption that the government can operate insurance projects more efficiently and cheaply than private companies can, the answer is that most people cannot afford it if they have to pay all of the costs of the protection and benefits which they receive.

Private estimates suggest that the government spent almost as much on medical services for 15 million people under its wing last year as the whole 140 million people of the country spent privately on all medical services. Another recent

study indicates that it costs the government almost three times as much to provide and maintain one hospital bed as it costs private hospitals. Such estimates should relieve us of any notion that the government can provide medical services more efficiently and cheaply than private individuals and companies. Thus, if people cannot afford private insurance — and the cost of governmental insurance would surely be no lower and might be much higher — it seems to follow that a social insurance system will not be of much benefit to the people unless they are allowed to take out more than they put in, with the balance of the funds coming from general governmental revenues contributed by people who have the income.

From that point of view, social insurance, including compulsory sickness, is a *device for redistributing the income of the country* — a means of taking from some persons and giving to others — and there is grave question as to how far this process can or should be carried in a capitalistic system in which the profit motive and economic motivation generally are supposed to make the system operate. If people who succeed in making large incomes have to devote too great a part of them to taking care of people who cannot or will not provide for themselves, a really tragic loss of incentives is likely to result. Sooner or later most people want to join those who are cared for by others.

Nor is this all there is to the question of cost. If the doctors are allowed to do as they please about signing up under the plan for compulsory sickness insurance, I have a feeling that most of the better doctors will not enroll. In such a case many of us, in order to get the quality of medical service that we desire, would have to go to these doctors privately and pay for their services out of our own pockets, in addition to paying the governmental levy for compulsory sickness insurance and the part of our income taxes which would be diverted to this purpose. This would undoubtedly give us the most expensive medical service ever invented.

Finally, in this, as in the case of so many types of governmental intervention designed to benefit great masses of people, we should probably find that the government had to impose severe restrictions on the behavior of individuals in order to prevent abuses and make the system operate at all. Schemes to have some people

provide for others are likely to produce a really tragic loss of a very important social asset — the individual's sense of responsibility for his own welfare. People are likely to ask why, if the government provides them with medical services at far less than cost, it should not also furnish them with food, clothing and shelter. And in the welfare state, where it is assumed that the government, if not the Lord, will provide, individual's actions are likely to be controlled and their freedom destroyed.

The point is that we cannot intelligently set out to make people well off regardless of how they behave. We can follow through on our intention to make them well off only if they behave in certain ways. If they will not behave in these ways voluntarily, then it will probably be necessary to make them do so. Of course, the advocates of social security projects do not put the matter in this fashion. They say that it may be necessary for the government to give the individual citizens a little friendly advice and supervision. In all probability, however, under too great an extension of social security, we should learn the truth of the proposition which says that, if the government assumes responsibility for the individual's welfare, it must also take control of the individual's conduct.

The welfare state, toward which compulsory sickness insurance would be another mighty step in this country, has already been set up in England, and there is evidence that many of the English people are far less than completely satisfied with it. As one writer says:

"The walls of the prison close in day by day; the area of enterprise shrink. Day by day the ceiling of opportunity is lowered. The prisoners are charged more and more for the expense of the multiplying jailers. Food and drink diminish in quantity and quality month by month. There is no incentive to bold undertakings except a heartless propaganda which urges all dogs collectively to jump the moon while keeping chained each dog with a spring or a heart in him. Socialism, as now interpreted, is competition without prizes, boredom with hope, war without victory, and statistics without end."

In my opinion, we should take action before it becomes possible to say the same things about this country.

COMMITTEES ON ARRANGEMENTS FOR 1949 ANNUAL MEETING

Dr. Maurice M. Hoeltgen, General Chairman of the Committee on Arrangements, has named the various groups to carry the local load for the 1949 annual meeting of the Illinois State Medical Society. The following appointments have been made, and it is hoped that all physicians named to these committees will find it possible to serve in the capacity requested.

COMMITTEE ON ARRANGEMENTS

Maurice M. Hoeltgen, General Chairman
Walter C. Bornemeier, Vice-Chairman

ADVISORY COMMITTEE

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Oscar Hawkinson
Arkell M. Vaughn
J. Roscoe Miller
Robert H. Hayes
Warren W. Furey
F. Lee Stone
Harry M. Hedge
H. Prather Saunders
H. Kenneth Scatlift
R. C. Oldfield
Fred H. Muller

ANNUAL DINNER COMMITTEE

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G. E. Johnson, Vice-Chairman
Frank Fowler
Willard O. Thompson
Myron Hipskind
Allison L. Burdick
G. Henry Mundt
Paul Lawler
Harry Dooley
Robert R. Mustell

RECEPTION COMMITTEE

Albert Mickow, Chairman
Alfred F. Gareiss, Vice-Chairman
Harry A. Oberhelman
Warren W. Young
Edward A. Skolnik
E. F. Carey
Charles E. Pope
Allen Hoover
Wright Adams
William S. Bougher
John T. Gregorio
John L. Reichert
Paul H. Holinger
Stanley F. Przygocki
Elmer V. McCarthy
Charles P. Eck
T. H. Kelly
Edwin J. Lukaszewski

COMMITTEE ON REGISTRATION AND INFORMATION

Walter Lawrence, Chairman
George F. O'Brien, Vice-Chairman
Robert McCready
Aaron Neiman
H. A. Fitzmaurice
William J. Blackwell
Gordon Elrick
John M. Staron
Wayne Slaughter
John Hanson
Charles Bibb
R. C. Aiken
Philip Campagna
William K. Bellew
I. S. Trostler

TECHNICAL EXHIBITS COMMITTEE

Harold C. Voris, Chairman
Herbert T. Nash, Vice-Chairman
Arthur G. Johnson
Joseph A. Forbrich
Milan M. Wasick

WOMEN PHYSICIANS COMMITTEE

Katherine W. Wright, Chairman
Georgiana Theobald, Vice-Chairman
Edith Farnsworth
Helen Patton
Eloise Parsons
Katherine M. Mayer
Huberta Livingstone
Johanna Heumann
Beulah Wallin

PUBLICITY COMMITTEE

Harry Stephens, Chairman
Earl H. Blair, Vice-Chairman
Pliny R. Blodgett
Paul C. Vermeren
J. Roscoe Harry
Richard F. Greening
J. L. Albright

TENTATIVE PROGRAM FOR GENERAL ASSEMBLIES

The following tentative program has been outlined by Dr. Eugene T. McEnery, Chairman of the Executive Committee of the Committee on Scientific Work for the 1949 annual meeting of the Illinois State Medical Society. These papers will be presented before the General Assemblies in the Grand Ballroom of the Palmer House during the three days of the meeting, May 16, 17, 18.

MONDAY MORNING, MAY 16, 1949

9:30—Opening of the 1949 annual meeting

- 9:40—"Diseases of the Parathyroid" — Robert M. Hoyne, Urbana
10:10—PRESIDENT'S ADDRESS — Percy E. Hopkins, Chicago
10:30—Recess
11:00—"Curability of Bulbar Poliomyelitis" — Thomas C. Galloway, Evanston
11:20—ORATION IN MEDICINE — "A Dean Looks at Medical Education and Practice" — Edward L. Turner, Dean, University of Washington School of Medicine, Seattle, Washington

MONDAY AFTERNOON, MAY 16, 1949

- 1:30—"Caustic Strictures of the Oesophagus — Their Immediate Management and Long Term Therapy" — Paul H. Holinger, Chicago
1:50—"Management of Abortions" — Armand Jean Mauzey, Chicago
2:10—"Protein Nutrition" — Paul R. Cannon, Chicago
2:30—"Differential Diagnosis and Management of Amoebiasis" — Jacob Arnold Borgen, Rochester, Minnesota
3:00—Recess
3:30—"Limitations and Pitfalls of Cytologic Diagnosis from the Clinical Standpoint" — Nathan Chandler Foot, New York, N. Y.
4:00—"Fractures of the Ankle" — Carlo S. Seuderi, Chicago
4:20—"The Cross-eyed Child" — Watson Gailey, Bloomington
4:40—"X-Ray Aspects of Lesions of the Oesophago Gastric Junction" — Joseph G. Litschgi, Chicago

TUESDAY MORNING, MAY 17, 1949

- 9:00—"Penicillin and Pediatrics" — Benjamin M. Kagan, Chicago
9:20—"Differential Diagnosis of Brucellosis" — Norman B. McCullough, Chicago
9:40—"Functional Uterine Bleeding" — Willard M. Allen, St. Louis
10:10—Recess
10:40—"Immunization in Early Childhood" — Louis W. Sauer, Evanston
11:00—"Early Diagnosis of Carcinoma of the Uterus" — Frederick H. Falls, Oak Park
11:20—Subject to be announced — William A. Sodeman, New Orleans, Louisiana

TUESDAY AFTERNOON, MAY 17, 1949

- 1:30—"Intestinal Obstruction in Infancy" — Robert Elman, St. Louis, Missouri
2:00—"Tumors of the Thyroid" — Everett P. Coleman, Canton
2:20—"Significance of Rectal Bleeding and the Importance of Diagnosing Early Carcinoma of the Colon" — Wendell Scott, St. Louis, Missouri
2:50—Recess
3:30—"Retro-lental Fibroplasia" — Ralph O. Rychener, Memphis, Tennessee
4:00—"Prevention of Toxemias of Pregnancy" — Howard L. Penning, Springfield
4:20—"X-Ray Manifestations of Adolescent Osteochondritis of the Spine in Adults" — Robert M. Potter, Chicago

WEDNESDAY MORNING, MAY 18, 1949

- 9:00—"The Uses and Complications of Local Anesthesia" — Max A. Sadove, Chicago
9:20—"Streptomycin in Treatment of Tuberculosis in Children" — Eugene T. McEnery, Chicago
9:40—"Vascular Disease" — Harris B. Shumacker, Jr., Indianapolis, Indiana
10:10—Recess
10:40—"X-Ray Aspects of Carcinoma of the Lung" — Cesare Gianturco, Urbana
11:00—"Masses in the Breast" — Harry A. Oberhelman, Chicago
11:20—Speaker from Illinois to be scheduled
11:40—Speaker from Illinois to be scheduled

WEDNESDAY AFTERNOON, MAY 18, 1949

- 1:30—"Management of Foreign Bodies in the Stomach" — Albert H. Andrews, Chicago
1:50—Title to be announced — Richard F. Herndon, Springfield
2:10—Speaker from Illinois to be scheduled
2:30—ORATION IN SURGERY — "Tumors of the Kidney" — Nathaniel G. Alcock, Iowa City, Iowa
3:15—Recess
3:45—"Pathology of Trauma" — Jerry J. Kearns, Chicago
4:05—Speaker from Illinois to be scheduled
4:25—Title to be announced — Walter H. Nadler, Chicago

PLANS FOR OUR MEETING

Work on the 1949 annual meeting of the Illinois State Medical Society to be held at the Palmer House on May 16, 17 and 18 has been under way since December of last year.

Section officers are planning programs. Dr. Coye C. Mason is preparing scientific exhibits which will include motion pictures again this year, as well as the outstanding group to be assembled in the Red Lacquer Room. The Executive Committee of the Committee on Scientific Work is lining up programs for the General Assembly, and each section is naming an out of state guest speaker in each specialty.

The secretary's office started the sale of technical exhibit space early in December, 1948. To date the following firms have reserved booths for our meeting. We feel that you should keep this list for reference and remember that these particular companies are cooperating with the Illinois State Medical Society and plan to act as your host at their booth during our annual session. Keep these firms in mind. They help make our annual meeting possible.

Abbott Laboratories
Ahlstrom Surgical Company
A. S. Altoe Company
American Hospital Supply Corporation
Armour and Company
Ayerst, McKenna & Harrison, Ltd.
The A. C. Barnes Company
Bard-Parker Company
Billhuber-Knoll Corporation
The Blue Cross Plan for Hospital Care
The Borden Company
The Burdick Corporation
The Cambridge Instrument Company, Inc.
Camel Cigarettes
The Carnation Company
Central Pharmacal Company
The Coca-Cola Company
Chicago Dietetic Supply House
Chicago Pharmacal Company
Ciba Pharmaceutical Products Company
Daniels Surgical and Medical Supplies
Doak Company, Inc.
Doho Chemical Corporation
Electro-Medical Equipment Co., Inc.
Eisele and Company
Eli Lilly & Company
Encyclopaedia Britannica
Farnsworth Laboratories
The C. B. Fleet Company
H. G. Fischer & Company, Inc.
Freeman X-ray Company
Hanovia Chemical & Manufacturing Company
Hoffman La Roche, Inc.

Holland Rantos Company
 H. & M. Sales Company
 Junket Brand Foods
 Lanteen Medical Laboratories
 Lederle Laboratories
 J. B. Lippincott Company
 M & R Dietetic Laboratories, Inc.
 Mead Johnson & Company
 Medical Aids, Inc.
 Medical Arts Supply Company
 Medical Protective Company
 The William Meyer Company
 The C. V. Mosby Company
 V. Mueller & Company
 National Drug Company
 Ortho Pharmaceutical Corporation
 Paravox, Inc.
 Parke, Davis & Company
 Philip Morris & Company, Ltd.
 Picker X-Ray Corporation
 Professional Budget Plan
 Professional Equipment Company
 Sanborn Company
 Sandoz Chemical Works, Inc.
 W. B. Saunders Company
 Schenley Laboratories, Inc.
 The Schering Corporation
 G. D. Searle & Company
 Security Laboratories
 Sharp & Dohme
 Smith, Dorsey Company
 Smith, Kline & French Laboratories
 Spencer, Inc.
 E. R. Squibb & Sons
 Sutliff & Case Company
 Swift and Company
 Universal Products Corporation
 Upjohn Company
 U. S. Vitamin Corporation
 Varick Pharmacal Company, Inc.
 Westwood Pharmacal Corporation
 Winthrop Stearns, Inc.
 F. E. Young & Company

The first and greatest need is education; education of the people, and through them education of the state. It is evident that if every man and woman in the United States were familiar with the main facts relating to the manner in which tuberculosis is communicated and the simple measures necessary for their protection, not only might we reasonably expect as a direct result of this great knowledge a great diminution in the death rate of the disease, but the people would soon demand and easily obtain effective legislation for its prevention and control. Edward L. Trudeau, M.D., Nat. Tuberc. A. Tr., 1905.

A.M.A. DEVELOPES 12 POINT NATIONAL PROGRAM

At a meeting held at 535 North Dearborn Street on Saturday, February 12, the American Medical Association presented a 12 point program for the advancement of medicine and public health. These 12 points are the answer and the hope of the medical profession in the stand being taken against compulsory health insurance on a national basis.

Constructive thought, positive action, and an affirmative program are presented in these important proposals. As a physician you should become familiar with the national policy of the profession and the goal toward which the American Medical Association is working.

A FEDERAL DEPARTMENT OF HEALTH

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine, and the coordination of integration of all Federal health activities under this Department, except for the military activities of the medical services of the armed forces.

MEDICAL RESEARCH

2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.

VOLUNTARY INSURANCE

3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas. Aid through the states to the indigent and medically indigent by the utilization of voluntary hospital and medical care plans with local administration and local determination of needs.

MEDICAL CARE AUTHORITY WITH CONSUMER REPRESENTATION

4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.

NEW FACILITIES

5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas in which the need can be shown and with local administration and control as provided by the National Hospital Survey and Construction Act or by suitable private agencies.

PUBLIC HEALTH

6. Establishment of local public health units and services and incorporation in health centers and local public health units of such services as communicable disease control, vital statistics, environmental sanitation, control of venereal diseases, maternal and child hygiene and public health laboratory services. Remuneration of health officials commensurate with their responsibility.

MENTAL HYGIENE

7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.

HEALTH EDUCATION

8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.

CHRONIC DISEASES AND THE AGED

9. Provisions of facilities for care and rehabilitation of the aged and those with chronic

disease and various other groups not covered by existing proposals.

VETERANS' MEDICAL CARE

10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care, including care of the veteran in his own community by a physician of his choice.

INDUSTRIAL MEDICINE

11. Greater emphasis on the program of industrial medicine, with increased safeguards against industrial hazards and prevention of accidents occurring on the highway, home and on the farm.

MEDICAL EDUCATION AND PERSONNEL

12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

STUDY DYE FOR USE AGAINST BLEEDING IN THROMBOPENIA

Toluidine blue, a dye used to combat bleeding from overexposure to radiation, is valuable in treating selected cases of the blood condition thrombopenia, says three doctors from the Shreveport, La., Charity Hospital.

In thrombopenia there is a decrease in platelets, colorless cells in the blood that help in forming blood clots, and bleeding from tiny blood vessels may result.

Writing in the January 22 issue of *The Journal of the American Medical Association*, J. E. Holoubek, M.D., a fellow of the American

College of Physicians, J. V. Hendrick, M.D., and W. J. Hollis, M.D., describe a trial of the dye on three patients suffering from bleeding associated with thrombopenia.

One of the patients apparently dying despite repeated blood transfusions, recovered dramatically and was discharged from the hospital as cured.

Even though the dye did not save the lives of the two other patients, it stopped bleeding in one, the doctors say. Its complete failure in one case may be explained by the absence of anti-coagulant substances in the patient's blood, they suggest. Research indicates that toluidine blue makes at least one such substance inactive.

MEDICAL ECONOMICS

The Medical Economics Committee. Chauncey C. Maher, Chmn., Hubert L. Allen, Emmet B. Bay, Edwin F. Baker, Carroll Birch, Thomas C. Brownling, Roland R. Cross, James Graham, George Halperin, Edwin S. Hamilton, Ford K. Hick, Edwin F. Hirsch, May McDonald Milligan, Marie Wessels, Walter M. Whitaker, Holland Williamson.



Admission to Medical School

John B. Youmans, M. D.

**Dean, College of Medicine, University of Illinois
Chicago**

The problem of admission to medical school has become a matter of acute concern to the individual seeking admission and to his family, his teachers and his community. It is of equal concern to the public, generally, and is a problem of national importance. More and more insistently, the question is asked, "How can I, or my son, or my friend enter medical school?" Almost as frequently, but more often from the public, is the question, "Why can't the medical schools take more students?"

The answer is at once simple and complex, and it satisfies no one. In its simplest form, the answer is that there simply are not enough places for all who apply; in fact, for all the *qualified* applicants who apply. The principal reason for the disparity between the number of applicants and the places available is the great increase in the number of persons who wish to study medicine. The number of medical schools

has not decreased; it has increased by one since 1945. There has been little decrease in the number of available places in the schools. The total enrollment in 1947-48 was somewhat below the peak covered by the excessive numbers crowded in by means of the accelerated schedule of teaching during the war. Some schools have increased their enrollment; others have reverted to pre-war enrollment. In 1947-48, there were 22,739 students in 77 medical schools, and 5,543 were graduated, an increase of 648 over the 4,895 graduated by the same number of schools in 1933. In general, the number of places available is as great as is consistent with the standard of education which must be maintained, and all schools are filled.

Discounting the effect of multiple applications, a procedure which appears to be less frequent now, the fact remains that there are many more applicants than formerly, and more than can be

accommodated. The reasons for this will not be discussed except to point out the natural growth of population, the popularization of medical science, and the expanding demand for physicians in many fields. Furthermore, the applicants, because of increasing pressure and rising standards for admission, have increased their qualifications until failure to meet reasonable standards for admission is insufficient to restrict the number to that which can be accepted.

If the question is asked, "Why are not more places provided?" the answer becomes much more complex and more difficult. There is, to begin with, the question of how much, if any, the nation's capacity for training doctors needs to be increased. It may be that the facilities are not great enough to train all the doctors needed to meet the national requirements, but that is a matter of dispute. Perhaps training more doctors would provide an undesirable excess. The possibility of a decrease in requirements for physicians or in the number of applicants with changing economic and social situations must be kept in mind and carefully considered before a decision is reached to expand greatly the medical school facilities. Medical plants are so costly and so slow to develop, that they cannot be thrown up over night to take care of temporary demands. These are questions which remain unsettled at present and which cannot be considered here. It may be assumed, however, that some increase in the number of places in medical schools, and in the number of graduates is justified. Why, then, hasn't this been done, or why isn't it being done? The answer is that it is being done, but to a limited degree. For instance, one additional school has been established since 1945. The increase, however, is not sufficient to meet the present demand. As to why more isn't being done, there are several explanations, but no answer. The building of medical plants is very costly. As yet, few agencies, be they governmental or private, have taken actual steps to build additional schools or increase the capacity of existing schools to a significant degree. By this is meant major additions, something more than the addition of a few personnel, some remodelling, or a small increase in operating budgets. The reason for the lack of interest or

enthusiasm on the part of private agencies is pretty obvious. Existing governmental policy and practices have made it extremely difficult for them to continue even their existing operations, let alone proceed with any expansion. The lack of greater activity and action on the part of the general public and the government representing them is less well understood because they have been the most vociferous in complaining about the lack of facilities for medical training, and yet, the ones best able to provide those facilities.*

Even should there be a disposition to enlarge existing schools and build new ones, there remain other obstacles. The first of these may be only temporary, but because of doubts of the permanence or degree of the increased demand and need for doctors, it acts as a deterrent. It is the current difficulties and delays in construction. The other is much more serious. It is the shortage of personnel. Where, with the present shortage, will doctors, medical teachers, nurses and other personnel be found to staff this new or expanded plant after it is built, and how long, with the drain on medical schools and the loss of their graduates to practice in other fields, will it be before adequate staffs can be assembled. These are at least some of the answers to the question of expanding facilities for medical education.

It gives little satisfaction, however, to point out these facts to the individual who, after long, arduous and expensive preparation faces the high hurdle of admission with the odds against him, or to one who has failed to secure admission to a medical school, particularly if he apparently has satisfied the announced requirements for admission. The individual wants to know why *he* can't get in, why *he* isn't the one chosen rather than others who applied. Such an individual is apt to feel that there must be a trick somewhere, that it must require "pull", pressure or something "under the counter". Despite this rather widespread and perhaps not unnatural belief, nothing could be farther from the truth.

It is clear from what has been written that some selection must be made from the many

*President Truman's proposal for additional facilities is made as this editorial is being written. So far, they are only proposals and are combined with other proposals of debatable merit.

applicants who present themselves. Although methods of selection differ at various schools, a description of the procedure at the University of Illinois College of Medicine may serve to allay some of these suspicions and lead to a better understanding of the very difficult and laborious process by which the University tries to admit the best qualified applicants on a just and equitable, competitive basis.

The first means of selection is the premedical scholastic record. By action of the Board of Trustees, the minimum acceptable grade average for the premedical studies is 3.5 on a scale of 5.0. In recent years the number of applicants with an average of 3.5 or higher has greatly exceeded the number of available places in the first year class (166). For the class entering in 1948, the number was 572 with 318 having averages of 4.0 or better. Obviously, this in itself requires that some additional selection be made, even if the selection were to be made solely on the basis of grades. Everyone will agree, however, that grade averages, scholastic accomplishment alone, is not of itself a sufficient criterion on which to base admission. No one will deny that moral standards and qualities, emotional stability, personal aptitude, interest, purpose, and health, should and must be taken into consideration in selecting those who later will become our doctors, in whose hands our health and lives and those of our families and friends will be placed. These qualities are therefore evaluated in selection. Such qualities are, however, more difficult to evaluate and express than are scholastic grades. To accomplish it, the following procedures are employed. (1) The applicant is required to submit an application form giving, besides such facts as age, and address, a great deal of personal information including such things as the following: living conditions at school, business and professional experience, extra-curricular activities, nature of financial support, schools attended, current school attendance, names of faculty advisors and instructors in the premedical sciences, names of professional persons as references, books and periodicals read regularly and recently, military status and experience, if applicable, and finally, a statement by the candidate of his reasons for wishing to study medicine and his plans for practice. (2) An estimate of the candidate's ability, personality, presence,

and character on an approved form, together with any special observation and comments is required from at least two of his science teachers. (3) He is required to furnish a medical report on the state of his health. (4) Also, since 1947*, the applicant has been required to take an aptitude test conducted by the Educational Testing Service, an independent agency of national scope operating under an agreement with the Association of American Medical Colleges, the national organization of medical schools to which all medical schools in this country belong. The current aptitude test, the most elaborate so far devised, evaluates the candidate in three respects: general ability, social awareness, and premedical science. Reports and testing are highly confidential and are carried on entirely independently of the faculties of the medical colleges. It is given at most of the universities and colleges where the candidate secures his premedical training, sometime during the year preceding action on the candidate's application.

The process of evaluation is by no means over, however. Each candidate with something more than the minimum qualifications is interviewed by two qualified members of the medical faculty. In the case of any significant disagreement, a third interview is arranged independently by the Registrar's Office.

With this data and information, the list of candidates is submitted to an Admissions Committee composed of the most experienced and senior members of the faculty, who labor hard and long, bringing to the task all the knowledge and judgment gained from many years experience in the selection and training of students in medicine. When indicated, additional evidence is obtained by further interviews from opinions of medical and psychiatric consultants, from additional recommendations and by other means. When all this information is in hand, the committee selects on the basis of their qualifications the 166 candidates who are to be admitted, together with a limited number of alternates.

There is, however, a final factor to be considered. Because the University is an agency of the State, and because the needs of the State vary with population density, some allowances

*Prior to 1947, another aptitude test was recommended, but not required.

must be made for the distribution of the successful applicants according to this factor. Therefore, the number admitted is allocated, at present, half to Cook County which contains approximately half of the people of the State, and half to the area outside Cook County.

It is not meant to imply that the procedure of selection described here is perfect or the best that can be devised. Studies are constantly underway in an effort to improve the process, to bring it in line with the best current procedures for selection, keeping in mind the particular

needs of the University as an agency of the State. Other medical schools as well as national organizations of medical colleges and others interested in medical education, are likewise engaged in such studies and their findings are available. Such studies will continue. It is hoped, however, that this description of the situation and of the procedure used will demonstrate clearly that the University of Illinois is making every effort to admit as many students as it can accommodate, students of the best quality, and in the most fair, impartial and equitable manner possible.



Your
Society Has Its
ANNUAL MEETING
on May 16, 17, 18
at the Palmer House
CHICAGO
It will be of
Interest to
YOU

STATE DEPARTMENT OF PUBLIC HEALTH



Local Health Departments

In 1943 the 65th General Assembly passed the Searcy-Clabaugh Law which enables counties, singly or in groups, by popular vote or by resolution of the County Board to establish local health departments. Up to now, 24 counties have taken advantage of this means to provide basic community health services. The remainder of the State continues to obtain minimal public health protection through the district offices of this Department as illustrated in the accompanying map.

Considering all things, the accomplishments thus far are not discouraging. Twenty-four out of 102 counties — almost 25 per cent — have been sufficiently concerned with local health conditions and the sanitation of their environment to assume responsibility for the community aspects of health. Although these counties contain about two-thirds of the people of Illinois, they embrace only about 24 per cent of the land area. The large cities and the more densely populated counties with a few notable exceptions are the ones which have full-time local health departments; the small towns and rural areas

for the most part are as yet dependent on the thinly spread services available through State employees assigned to the various large health districts.

In 1946 the American Medical Association in its Ten-Point Program advocated fully equipped and adequately staffed local health departments and the four conferences on rural health sponsored by this Association have served to augment the interest in this health facility. In 1948 at the interim session of the House of Delegates the A.M.A. reaffirmed its position in favor of adequate local public health service throughout the nation.

The Committee on Rural Health of the Illinois State Medical Society, under the chairmanship of Harlan English, has been a valuable proponent of the extension of local health units in the more sparsely settled areas of this State. General public interest in this subject has grown throughout the State through the efforts of the Statewide Public Health Committee, under the co-chairmanship of Mr. Benjamin Wham and Mrs. Walter Stevenson.

A detailed map of Illinois showing its 102 counties. The map is divided into several regions, with some counties shaded in a hatched pattern. These shaded counties include: DuPage, Cook, Lake, Kane, DeKalb, Winnebago, Stephenson, Carroll, Ogle, Whiteside, Lee, Henry, Bureau, Rock Island, Mercer, Knox, Stark, Putnam, Marshall, Woodford, Livingston, Adams, Hancock, McDonough, Fulton, Morgan, Mason, Logan, McLean, Ford, Vermilion, Schuyler, Brown, Cass, Mehard, Sangamon, Macon, Pike, Scott, Greene, Macoupin, Christian, Shelby, Douglas, Edgar, Clark, Adams, Calhoun, Jersey, Madison, Bond, Fayette, Effingham, Jasper, Crawford, St. Clair, Clinton, Marion, Wayne, Richland, Lawrence, Washington, Jefferson, Edwards, Randolph, Perry, Franklin, Hamilton, White, Union, Johnson, Pope, Hardin, Alexander, Pulaski, and Mifflin. Lines connect the names of the counties to their respective locations on the map. The map is oriented with North at the top.



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Illinois Medical Journal

The American Public Health Association in its scholarly blueprint, "Local Health Units for the Nation," published in 1945 brings together the ideas of the experts in the field and embodies the experience in local health practice in America. The subsequent conferences in Ann Arbor and Princeton produced a vast amount of professional and lay understanding in participation in the movement for local public health departments. Voluntary organizations which had operated commendable though limited health programs for years were quick to see that their particular area of health interest or specialized program could not attain the desired ends without the foundations of good balanced and basic community health service. Many of these health organizations and service clubs now are urging their member organizations to help in the drive for health unit coverage of all areas of the country.

While the full impact of this action at the national level has not as yet been felt through all chapters of these organizations in Illinois, the issue has come squarely before The Congress. HR 267 (Priest) and S 522 (Hill, Saltonstall, Cordon, Douglas, Chapman, Smith, Humphrey, Malone, Kefauver and Knowland) companion Bills, provide for grants-in-aid for local public health services. The Bills declare as policy and purpose that

"(a) adequate protection of the Nation's health is essential to the security and well-being of our country and cannot be achieved unless basic public-health services are available in every locality through adequately staffed and properly equipped local public-health units;

"(b) at present more than forty million persons in the United States live in areas not served by local public-health units and less than ten million persons live in areas served by units which meet basic minimum public-health standards;

"(c) many areas cannot support local public-health units staffed and equipped to the extent necessary for the provision of the basic public-health services essential to the well-being of the community;

"(d) it is therefore the policy of the Congress, and the purpose of this Act, in the promotion of the general welfare and in the interest of national security, to assist the States, through the measures provided for in this Act,

in developing and maintaining local public-health units organized to provide basic full-time public-health services in all areas of the Nation and in the training of all types of personnel for local public-health-unit work."

The grant-in-aid principle for local health services is not new in Illinois. In the State health district, 100 per cent of the cost of official local health services is borne by the State. In the other areas, those with organized full-time local health departments with qualified staffs and sound programs, the State grant-in-aid has been issued on a formula basis relating to the per capita sums available for expenditure on public health. A similar but more generous grant-in-aid program with State funds functions in California.

Despite the ground swell of general concern at national and state levels, there is need for more thorough understanding of the realm of services of the local health departments and a greater appreciation as to the way in which this local facility can operate to influence healthful living in an area. The American Medical Association at the interim session of the House of Delegates in St. Louis in 1948 helped considerably in this understanding by adopting a fresh and realistic definition of public health, which is as follows:

"'Public Health' is the art and science of maintaining, protecting and improving the health of the people through organized community efforts. It includes those arrangements whereby the community provides medical services for special groups of persons and is concerned with prevention or control of disease, with persons requiring hospitalization to protect the community and with the medically indigent."

Exactly how this art and science is to operate in a given area depends on the particular health problems of that area, the vision of the local board of health, the wishes of the local people, and on the background, training, imagination and initiative of the professional staff of the local health department. While it is quite generally realized that health problems are not exclusively the province of medicine, it is clearly acknowledged that the local health department is most closely allied to medicine and its successful operation and its useful existence depends in a large measure upon the interest of the physicians. It might be well for local medical societies to

exert constructive leadership in getting organizations started in areas not yet covered. The experience in Illinois has quite understandably shown that in areas where the medical society took the initiative in the local public health movement, the operation has been smoother. It would therefore be encouraging to learn that the subject was under discussion in local medical

societies. Physicians should, at the start of their deliberation, know that in the interests of efficiency and economy certain groupings of the smaller and less populous counties are recommended. For these details and for discussions on the subject in general, physicians should feel free to call upon the State Department of Public Health.

RADIUM EFFECTIVE AGAINST EARLY CANCER OF CERVIX

Radium therapy yields good results against an early stage of one type of cancer of the cervix, according to Juliette Baud, M.D., of Curie Foundation of Paris, France.

Writing in the December 18 issue of *The Journal of the American Medical Association*, Dr. Baud describes a study made over a 12 year period.

Because of insufficient equipment, physicians at the foundation were unable to use x-rays in combination with radium therapy for 105 patients with early cancer of the cervix, she says. These patients received only local treatment with radium.

After five years, 74, or 70.4 per cent, of the women were alive and without evidence of disease. Eighteen had recurrences, 11 died of other diseases, and two died of complications of the treatment.

The little girl had been so naughty her mother finally locked her in the clothes closet. Suspicious of her quietness the mother inquired: "What are you doing in there?"

Slowly and with much emphasis the small voice said: "I'm thpittin' on your new hat, and thpittin' on your good dress, and thpittin' on your shoes—and—and."

There was a breathless pause.

"And what are you doing now?"

"Waitin' for more thpit," answered the voice of vengeance.

CORRESPONDENCE



ANNUAL MEETING, CENTRAL STATES SOCIETY OF INDUSTRIAL MEDICINE & SURGERY

On Sunday, May 15, 1949, the day before the annual meeting of the Illinois State Medical Society opens at the Palmer House, the Central States Society of Industrial Medicine & Surgery will have its annual meeting. The tentative program has been announced by H. Glenn Gardiner, M.D., Program Chairman of the organization.

BUSINESS MEETING — Election of Officers
10:00 a.m.

SCIENTIFIC SESSION

- 10:30—"Taking the Brrr Out of Beryllium" — The industrial hygienist talks to the industrial physician
- 11:00—"Ruptured Intervertebral Discs" — a down-to-earth appraisal by an outstanding orthopaedist
- 11:30—"Chemotherapy and Antibiotics in Industrial Medical Practice" The rationale of such medication analyzed by a prominent internist
- 12:30—**FELLOWSHIP LUNCHEON** — An opportunity to meet the speakers of the day informally
- 2:00—"The Point of View of Organized Labor" — An outstanding spokesman for labor will be chosen to present this subject
- 2:25—"The Point of View of the Employer" — An outstanding spokesman for management will be chosen to present this subject
- 2:50—"The Point of View of Organized Medicine" —A representative of the American Medical Association will be with us for this presentation

3:15—"The Point of View of the Industrial Physician" — This will be reviewed by a prominent industrial physician

Following these formal presentations, and under the guidance of a moderator, there will be adequate time allowed for questions, cross-examination, and rebuttal.

It is to be expected that from this forum meeting, we will be given an opportunity to learn of the various relationships and their significance, of the health programs organized labor are asking, in some cases demanding, and in other instances sponsoring. From these discussions we may expect to learn what, if any, relationships these programs may have or how they may conceivably affect the health insurance legislation perennially presented to the Congress of the United States.

The Chicago Society of Industrial Medicine and Surgery will join in this meeting. The medical profession at large, is cordially invited to attend these sessions. If you come to Chicago on Sunday, May 15, plan to attend this full day session.

YOUR MENTAL HOSPITALS — RECOVERY OF PATIENTS

An average of one patient every thirty-six minutes was admitted every day of last year to one of the Illinois State Hospitals for the men-

tally ill. A total of 13,610 persons entered these institutions.

During the same period many patients were discharged from these hospitals, returning to their home, to their friends, or to the communities as family placements. Out of a population of 34,700 patients in the nine mental hospitals, there were 8,250 patients discharged and 4,540 placed on convalescent out-patient care during 1948. Patients may leave the mental hospitals in the following manner:

1. *Convalescent Outpatient Care*

(a) *Conditional discharge*

When a patient has sufficiently improved to warrant a return to his home or to his friends, the person may be placed on a conditional discharge for a period not to exceed two years. The person remains under the supervision of the state hospital, and must report for further follow-up psychiatric care at one of the outpatient clinics. After a trial period, the patient can receive a complete or absolute discharge. Over 4,000 patients were given conditional discharges last year.

(b) *Family Care*

This is a placement of the patient in a home other than the one from which he entered the hospital. This is selected on a prescription basis, and is patterned to meet the further needs of the patient. Supervision is through visits by the social worker, or at the outpatient psychiatric clinic. The institution may pay for the boarding-out of the patient, or he may earn his own support while on family care. Approximately 460 patients were placed on family care last year from the nine mental hospitals.

2. *Absolute Discharge*

A patient may receive a complete or absolute discharge if the patient has:

- (a) recovered from his mental illness, or is no longer in need of mental treatment, or
- (b) is found on examination not to be mentally ill and is without a psychosis, or
- (c) sufficiently improved mentally that he no longer needs care in a mental hospital and the psychiatric outpatient clinics.

Some of the patients may leave the institution on an absolute discharge, while others may first be placed on a conditional

discharge and, after a period of trial on convalescent outpatient care, receive an absolute or complete discharge. Last year 8,250 patients recovered, or were sufficiently improved so that they were no longer in need of hospital or clinic care.

In spite of these listed discharges, the total patient population of the nine mental hospitals continues to increase each year. The total population rose 1,400 over the same period last year, to a grand total of 34,700 mentally ill patients. There were over 6,000 persons employed in the care and treatment of these patients. During the same period there were over 850 unfilled positions. These shortages, or vacancies, were mainly physicians, nurses, social workers, dieticians and attendants. If more personnel and more qualified professional and semi-professional personnel were obtainable, it would be possible to discharge more patients and place many more patients on convalescent outpatient care.

GRUNOW CLINIC MAKES GIFTS TO NORTHWESTERN

Two gifts totaling \$65,000 from the Lois Grunow Memorial Clinic, Inc., of Phoenix, Ariz., to the Northwestern University Medical School were announced recently.

The sum of \$50,000 has been allocated by the Clinic's board of directors' of which William C. Grunow is chairman, in support of the department of surgery, and is to be known as the Lois Grunow Surgical Fund. The second gift, in the amount of \$15,000, has been designated as the Lois Grunow Professorship Fund, and will finance a professorship in the surgery department.

Both the Funds and the Clinic were named in memory of Lois Grunow, who died at the age of seven, by her father, Mr. Grunow, who founded the Clinic in 1930 and has been its principal donor.

INDUSTRIAL PHYSICIANS TO MEET IN DETROIT

The Industrial Physicians and Surgeons of the United States and Canada will hold their 34th annual meeting at Detroit, Michigan, April 2 to 9, 1949, with headquarters at the Book-Cadillac and Statler Hotels.

Participating groups are the: American Conference of Governmental Industrial Hygienists.

American Industrial Hygiene Association, American Association of Industrial Dentists, and the American Association of Industrial Nurses.

The week-long program is featured by surgical clinics at the Henry Ford and Harper Hospitals, scientific sessions on such timely subjects as the problems created by atomic radiation, cardiovascular diseases among the employed, alcoholism in industry and toxicities of industrial substances such as beryllium, agricultural chemicals and rare metals and special sessions for physicians in steel manufacturing and heavy industry, in rubber, petroleum and chemicals in coal mining and metal mining.

All physicians and surgeons, industrial hygienists, industrial nurses and others interested in industrial health are invited to attend.

OBSTETRICIANS MEET IN NEW YORK IN 1950

The International And Fourth American Congress On Obstetrics And Gynecology will meet May 14 to 19, 1950, at the Hotel Statler, New York City.

All inquiries pertaining to the meeting should be addressed to the Chairman, Dr. Fred L. Adair, at 24 West Ohio Street, Chicago 10, Illinois. The site of the meeting, the Hotel Statler in New York City, was formerly the Hotel Pennsylvania.

CHICAGO DERMATOLOGICAL SOCIETY ELECTS OFFICERS

At the Annual Meeting of the Chicago Dermatological Society held January 19, 1949, the following officers were elected: President: Dr. Carl W. Laymon, Minneapolis, Minn., Vice-President: Dr. Irene Neuhauser, 7 W. Madison Street, Secretary-Treasurer: Dr. James R. Webster, 122 S. Michigan Ave.

OPHTHALMIC RESIDENCIES NOT EVALUATED

The American Board of Ophthalmology wishes to announce that it does not evaluate, approve, or disapprove any ophthalmic residency toward fulfilling the requirements for candidates for board examinations. Any candidate who qualifies for the board examination and completes the pre-requisites as outlined in the booklet of information will be accepted. A copy of this book-

let can be obtained from the Secretary of the American Board of Ophthalmology, 56 Ivie Road, Cape Cottage, Maine.

CLINICAL FELLOWSHIP IN INDUSTRIAL MEDICINE

Under the joint sponsorship of the New Departure Division, General Motors Corporation, Bristol, Connecticut and the Yale Institute of Occupational Medicine and Hygiene, utilizing medical, teaching and hospital facilities in Bristol and New Haven and the cooperative assistance of the Bureau of Industrial Hygiene, Connecticut State Department of Health, a one-year clinical fellowship is offered to a qualified candidate who wishes to pursue a graduate course of instruction in occupational medicine.

A candidate must be a graduate of a Class A medical school, from the upper two-thirds of the class. At least twelve months rotating internship (or mixed type hospital training equivalent to this) is required in addition to an evidenced interest in occupational medicine and hygiene, public health, health conversation and case finding programs. Personality qualifications should include well developed social consciousness combined with a practical aptitude and liking for diagnosis and medical and surgical therapy on an individual basis. General qualities of character must be satisfactory and personal interview will be necessary. A license to practice Medicine and Surgery in the State of Connecticut is required. Desirable additional qualifications include: practical experience in occupational medicine and hygiene (service with the Armed Forces may be acceptable); graduate or practical public health experience; additional intern or resident training.

The work is arranged in a manner to devote approximately two months during the year to each of the following sections: Preplacement and Periodic Physical Examinations; Care of Injuries and Occupational Diseases; Health Consultants; Industrial Hygiene and Safety including an uninterrupted two-or three-week period of orientation with the Bureau of Industrial Hygiene, Connecticut State Department of Health; Administrative practices; Special Assignments which shall include a short thesis or project to be carried out during the year, attendance at 20 or more clinical confer-

ences at the School of Medicine, attendance at graduate sessions in Public Health including Public Health 110 (Industrial Hygiene and Sanitation Winter Term, 24 hours), observation of the Hartford Small Plant Services (one or two weeks in Plants). A candidate who completes his fellowship to the satisfaction of the Faculty will be awarded a certificate.

The annual stipend varies, but as a rule is between \$2500 and \$3600, depending on experience, marital status and other factors. Meals and living quarters are not supplied; however, assistance will be rendered to the candidate in making arrangements for quarters in Bristol. For his own convenience, the candidate should have an automobile.

Application forms for this fellowship, which will run from July 1, 1949 through June 30, 1950, may be obtained from the Institute. Applications must be received before April 1, 1949.

ILLINOIS DIPLOMATES OF THE NATIONAL BOARD OF MEDICAL EXAMINERS

There will be a luncheon of the Illinois Diplomates of the National Board of Medical Examiners on Monday, May 16, at 12:30 o'clock in one of the private dining rooms on the third floor of the Palmer House.

All Diplomates are urged to attend. There will be a discussion of recent developments in the National Board of Medical Examiners, and its plans for the future.

WHERE IS OUR HISTORY?

To the Editor:—

I am wondering what has become of the history of the Illinois State Medical Society.

Some twenty years ago the society spent several thousand dollars accumulating a vast amount of material, several trunk-fuls I am told, which was in the hands of the late editor Dr. Whelan. Since then an attempt has been made to revive the history, and at one time it was suggested that the women's auxiliary of each county write up the individual county histories, and that these be compiled into a state history.

Lately, I understand, an historical committee has been formed and is going ahead with the project of collecting material and sorting it out so

that histories can be compiled. The work of this historical committee is tremendous and deals with the development of medicine in this state for over a hundred years. It naturally includes the growth of medical science, the growth of colleges, hospitals, nursing, and special societies, and the histories of individual noted physicians. As I see it, the work has no limitations and no end.

What we need is an overall, comprehensive review of the gradual development of medicine and the facilities for caring for the sick, in the last hundred years. Also we need a history of the men who have made up our medical societies in the various counties. It is to this last that I wish to draw your attention with some rather specific suggestions.

Each county should have a loose leaf file for every physician in the county, the first page of which should be his application blank for membership in the county society, and following that several blank pages could be inserted upon which newspaper clippings could be filed as well as other items of interest concerning his life. In this way we would have an automatic living history produced of the individual which could be easily compiled into a printed book from time to time. Somehow or other the individual doctor is always anxious to see his name mentioned in any historical sketch, and probably interest cannot be kept alive unless we do publish some from time to time that deals with our history, our friends, or ourselves.

When it was suggested that I write you this letter, I had publicly said that I thought the historical committee and all of the officers of the state medical society needed some needling to keep them on and at the job. However, it is not a one man job; it is a job for all of us and the county societies should do their part in compiling their histories. They sure need a tonic or a needling of benzedrine now and then to keep them up and at it. Sure it is your fault, Mr. Editor; it is the history committee's fault, and it is everybody's fault. But this time when we have really made a start, let's tell the members about it and keep up an active interest and really produce something in the next year to show that the members' money has not been spent in vain.

Very truly yours,

A chronic knocker and yet a real booster,

ORIGINAL ARTICLES



Treatment of Pneumonia By Single Injection Daily of Potassium Penicillin In Beeswax Peanut Oil Mixture

**Italo F. Volini, M.D., Wm. S. Hoffman, M.D.
and James J. Hughes, M.D.
Chicago**

Penicillin is now universally recognized as specific therapy for the pneumonias, especially those of pneumococcic origin. The total daily dose of about 300,000 Oxford units as necessary to combat all but the most severe infections is also fairly standard practice. What remains to be established is the method of administration which is most efficacious and the particular form in which penicillin is most satisfactory. The present study was undertaken to add evi-

dence to investigations of these two closely related factors.

Parenteral administration is generally preferred to the oral route as the more efficacious, though recent evidence¹ suggests satisfactory results with the latter method. Until the work of Romansky and Rittman² parenteral administration necessitated dividing the daily dose into sixths or eighths for frequent injection in order to maintain therapeutic concentrations of penicillin in the blood. This requirement acted as an inhibitory influence in the use of penicillin, as it limited therapy to the hospitalized patient or to the person receiving nursing care at home. Obviously, development of a method

From the Hektoen Institute for Medical Research of Cook County Hospital, the Department of Medicine of Cook County Hospital and the Loyola University School of Medicine.

Presented before the 108th annual meeting, Illinois State Medical Society, Chicago, May 10-12, 1948.

of therapy necessitating only one massive dose daily eliminates much of the objection to the parenteral route of administration. To accomplish this required prolongation of the action of penicillin by delaying the rate of absorption in the blood.

Code and his associates³ directed attention to the retarding effects of beeswax when dispersed in sesame or mineral oil in successful experiments in which they delayed the absorption of desoxycorticosterone, histamine and heparin.

Romansky and Rittman² applied their technics to the preparation of penicillin and proved conclusively that beeswax is the factor in retardation, though they preferred peanut oil to other oils as the vehicle for dispersion because of its higher viscosity. From their studies they concluded that 1 cc. of the preparation containing 300,000 Oxford units of calcium penicillin suspended in peanut oil with a dispersion of 4.8 percent beeswax by volume maintained effective blood levels for about twenty-four hours.

Conflicting estimates of duration of therapeutic concentration of penicillin suspended in oil and beeswax are noted in the literature. Kirby and his associates⁴ recorded assayable blood levels from eight to twenty-eight hours after administration of a single massive dose, but they found that in approximately two-thirds of the persons studied penicillin could not be detected for more than twelve hours following administration. Further studies⁵ show that subcutaneous injection of 600,000 Oxford units of penicillin in the beeswax-oil mixture contained in 2 cc. maintained satisfactory blood levels for twenty-four hours or longer.

Since the introduction to penicillin therapy of administering the total daily dose in one injection, successful results with this method have been reported in the treatment of gonorrhea,⁶ pneumonia,⁷ staphylococcic infections,⁸ streptococcic infections,⁹ syphilis,¹⁰ and other infections.

The factor determining the amount of penicillin that can be suspended in 1 cc. of beeswax-oil mixture is potency of the drug, interpreted as number of Oxford units per milligram of penicillin. It is apparent, therefore, that use of penicillin salts of low potency increases the proportion of penicillin to beeswax in each centimeter of mixture, thereby decreasing the

factor of retardation. Romansky and Rittman² show that increasing the dose quantitatively (2 cc. of mixture) does not prolong blood concentrations but, rather, heightens the level of concentration. Hence, a dose of 300,000 units of penicillin of a potency of 450 units per milligram contained in 2 cc. of mixture will give higher blood levels for a shorter period than an equally large dose of penicillin of double the potency contained in 1 cc. of mixture.

Consequently, the present study, undertaken primarily to add further evidence to the therapeutic advantages of the single massive dose administered daily in treatment of pneumonia, utilizes potassium penicillin G instead of calcium penicillin used by other investigators because of the much higher potency of the former: 1435 Oxford units per milligram, as compared with 900 to 1000 Oxford units per milligram of the calcium salt. The high potency requires that to obtain 300,000 units, only 210 mg. of potassium penicillin is required to make 1 cc. of beeswax-oil mixture, whereas 250 to 300 mg. of calcium penicillin is required per cubic centimeter. Displacement of beeswax (the retarding factor) is consequently appreciably less. Because of the use of potassium penicillin in this series of patients appraisal of toxic reactions and clinical response becomes an important phase of the study.

SUBJECTS

Subjects forming the basis of this study were 104 patients with lobar pneumonia who were admitted routinely to the medical wards of Cook County Hospital and were selected consecutively without regard to sex-age, associated diseases or complications. The series comprises, therefore, a better than average cross section of patients, since the incidence of complicating factors is greater in persons hospitalized in a charity institution than in the private hospital. Each patient was evaluated clinically and by means of the usual laboratory technics was classified according to the causitive organism of his infection (by type, if pneumococcus.) Blood cell and differential counts were determined. X-ray studies and fluoroscopic examinations were made of all patients with questionable diagnoses.

Causitive organisms were identified in 70 patients (67.3 percent) of the series, sixty-eight

TABLE 1

Series of 104 Cases of Pneumonia Classified According to Etiologic Organism Showing Occurrence of Bacteremia and Death.

ETIOLOGIC ORGANISM	NO. CASES	BAC-TEREMIA	DEATHS
Pneumococcus (Typed)			
I	12	5	1
II	21	5	1
III	7	1	0
IV	2	0	0
V	3	1	1
VI	1	0	0
VII	5	3	0
VIII	4	1	0
XI	1	0	0
XII	2	1	0
XIII	1	0	0
XVI	2	1	0
XVIII	1	0	0
XX	2	0	0
XXIV	1	1	0
XXV	1	0	0
XXXI	1	0	0
Pneumococcus (Untyped)	1	0	0
Streptococcus	2	0	0
Total Cases in Which Organism Was			
Recovered	70	19	3
Unknown	34	0	1
Total of All Cases	104	19	4

TABLE 2.

Criteria for Estimating Severity of Illness and Incidence in 104 Cases of Pneumonia.

CRITERIA	PNEUMONIA OF KNOWN ETIOLOGY	ALL PNEUMONIA
Pneumonia of Pneumococcic Origin	97.1%	65.3%
Pneumonia of Types I, II, III, VII and VIII	70.0	47.1
Bacteremia	27.1	18.2
Multilobar Involment	(Not Available)	23.1
Average Duration of Illness Prior to Treatment	3.66 days	
Average Duration of Treatment	6.30 days	

stitutional inferiority and duration of exposure to the disease were not evaluated as additional indication of overwhelming infection because of the unspecific nature of these factors. It is certainly true, however, that they do influence the course of disease.

Further evidence that the proportion of severely ill patients was large in this series is the high incidence of associated diseases noted on admission. (Table 3.) Thirty-four patients (32.7 percent) were included in the study despite the presence concurrently with pneumonia of chronic alcoholism, delirium tremens, cardiovascularrenal disease, portal cirrhosis, chronic emphysema and others.

More than half of the patients were over 40 years old. Thirty-one persons in the series (29.8 percent) were over fifty. Of the remaining seventy-three (70.2 percent) twenty-nine (27.9 percent) were between 40 and 49 years old.

Average duration of disease prior to treatment was 3.66 days, which data compares favorably with information from a series of 48 patients with pneumonia treated with penicillin administered orally¹: Further similarities in these two series are noted in the incidence of the more virulent types of pneumonia (62 percent of pneumococcic pneumonias) and the percentage of typed pneumonias to those of non-pneumococcic origin (52.1 percent.)

demonstrating pneumococci and two, streptococci. One patient presented pneumococci of undetermined type. (Table 1.) In 34 patients (32.7 percent) presenting unquestioned evidence of pneumonia, organisms could not be determined and did not show the Neufeld reaction on examination. Incidence of pneumonia caused by the more virulent pneumococcic strains usually associated with the highest mortality types I, II, III, VII and VIII was 70 percent of pneumonia of known cause. In nineteen (27 percent) of these patients, bacteremia was present, and in 24 patients of the entire series (23.1 percent) there was multilobar involvement. (Table 2.)

Most of the patients in the series were extremely ill. Criteria for determining severity of illness (Table 2) were incidence of the more virulent types of pneumonia, presence of bacteremia, duration of the disease prior to institution of treatment and incidence of multilobar involvement. Evidence of malnutrition, con-

TABLE 3.

Associated Diseases in 104 Cases of Pneumonia Treated with Potassium Penicillin in Peanut Oil and Beeswax

DISEASE	NO. OF CASES
Chronic Alcoholism	5
Delirium Tremens	8
Cardiovascular-Renal Disease	5
Bronchial Asthma	2
Portal Cirrhosis	2
Chronic Emphysema	2
Chronic Bronchiectasis	1
Pulmonary Tuberculosis (not verified)	1
Rheumatic Heart Disease (Decompensated)	1
Syphilitic Heart Disease (Compensated)	1
Hypertension, Idiopathic	1
Severe Chest Injury Two Days Prior to Onset of Pneumonia	1
Chronic Osteomyelitis of Tibia	1
Syphilis of the Central Nervous System	1
Acute Pyelitis	1
Chronic Infectious Bronchitis	1
TOTAL	34 (32.7%)

PREPARATION OF PENICILLIN AND ADMINISTRATION

All patients in the series were treated with a sterile suspension of potassium penicillin G in a menstruum of peanut oil in which 4.8 percent by volume of beeswax had been dispersed after the method described by Romansky and Rittman². Potassium penicillin G was selected because of its extremely high potency of 1435 Oxford units per milligram, which permitted the entire daily dose of 300,000 Oxford units to be contained in 1 cc. of the mixture with a displacement of beeswax by only 210 mg. of penicillin.

The total daily dose was administered in one injection given intramuscularly over the insertion of the deltoid muscle of along the lateral aspect of the thigh overlying the fascia lata. Sometime during the last two hours of the morning was the time chosen for injection.

The technic of heating described by Code and his associates³ was followed to facilitate withdrawal of the mixture from the container. An 18 gauge needle was used for withdrawal and a 20 gauge needle for injection. Therapy was continued during the febrile period and for seventy-two hours thereafter. No other specific

TABLE 4.

Total Dose of Potassium Penicillin in Peanut Oil and Beeswax Given in 104 Cases of Pneumonia

Average	1,944,000 Oxford Units
Maximum	4,890,000 Oxford Units
Minimum	900,000 Oxford Units

TABLE 5.

Duration of Treatment with Potassium Penicillin in Peanut Oil and Beeswax in 104 Cases of Pneumonia

Average	6.3 days
Maximum	16.0 days
Minimum	3.0 days

therapy was used. Supportive treatment, including high intake of fluids, was used freely. Aspirin was prohibited because of its possible antipyretic effect.

The average total dose of penicillin was 1,944,000 units, and the maximum total dose used in the series was 4,890,000 units. (Table 4.) The smallest total dose given was 900,000 units. Since therapy of all patients was continued for three days following return of the temperature to normal, the instance cited of the smallest total dose indicates that some patients become afebrile almost as soon as treatment is begun.

The average duration of treatment of patients in the series was six and one-third days, with a maximum of sixteen and a minimum of three days. (Table 5.)

METHOD OF STUDY

Concentration levels of penicillin in the blood were determined in 88 patients of the series at intervals following injection. Estimations were made by the B subtilis serial dilution method of Randall, Price and Welch¹¹ as modified by Hickey¹². The details of this modification and the data showing its reliability were reported in a previous paper¹³.

A total of 177 determinations (Table 6) of penicillin concentration were obtained in patients of the series. Because of the controversy regarding maintenance of therapeutic levels from the single injection daily in penicillin therapy, it was deemed advantageous to obtain concentrations of penicillin in persons without infectious disease. A total of 100 determinations

TABLE 6. — Plasma Levels Determined at Intervals After Injection with Potassium Penicillin in Peanut Oil and Beeswax in 88 Cases of Pneumonia, Some Complicated by Other Miscellaneous Infections.

Weighted Value	Penicillin Units Per C.C. of Plasma	Time After Injection by Hours													
		1½	2	3	4½	18	19	20	21	22	23	24	25	26	
1	0.0							1		1		7		1	
2	0.03					2		2		2		26			
3	0.06						2	1	2	1		29		1	
4	0.125					2		2	2	3		24	1		
5	0.25	2			1			3		1	2	19	1		
6	0.50		3				1			1		10	1		
7	1.00		3	3					1	3		4	1		
8	2.00		1	1								3			
Total No. of Determinations		2	7	4	1	4	3	9	5	12	2	122	4	2	
Average Concentration															
Determined Geometrically		.25	.85	1.25	.25	.06	.125	.08	.15	.163	.25	.10	.38	.03	
Average Concentration															
Determined Arithmetically		.25	.85	1.25	.25	.08	.21	.12	.27	.36	.25	.23	.47	.03	

were therefore made in 25 patients considered normal by the criteria of this study in that they did not have demonstrable infectious diseases. (Table 7.) Average levels were estimated both arithmetically and geometrically for comparison, as certain misconceptions have arisen when averages were deduced only arithmetically, or comparisons were made of averages estimated differently.

By using a weighted linear value for each corresponding level, determining the arithmetical mean of these values and transposing into penicillin units per cubic centimeter of plasma, the significance of occasionally occurring extremes which are undoubtedly errors is minimized. It is assumed that such variations are probably due to inadequate excretory function of the patient or to technical errors all too frequently encountered in laboratory procedures.

While the objectives of this paper certainly do not include comparative studies of absorption of penicillin in health and disease, the introduction of data from twenty-five so-called normal persons (without infectious disease) helps to corroborate previous reports of delayed absorption produced by beeswax in peanut oil.

Careful analysis was made of febrile response (Table 8) following institution of therapy, with records of number of patients whose temperature returned to normal within twenty-four hours, from twenty-four to forty-eight hours, within seventy-two hours and over seventy-two hours. Cause of mortality was analyzed to determine whether any death was referable to the form of

therapy or may have been avoided with other therapeutic agents. The age of patients in the series was associated with mortality for comparative purposes (Table 9.) Additionally, complications to pneumonia were carefully observed and were appraised in relation to mortality (Table 10.)

Clinical response of the patients was carefully observed in order to compare toxic reactions to potassium penicillin with toxic reactions reported in the literature to calcium penicillin.

TABLE 7. — Plasma Levels Determined at Intervals After Injection with Potassium Penicillin in Peanut Oil and Beeswax in 25 Cases in Which Infectious Diseases are not Detected.

Weighted Value	Penicillin Units Per C.C. Of Plasma	Time After Injection By Hours			
		1	2	6	24
1	0.00				3
2	0.03	1		2	3
3	0.06	1	1	6	6
4	0.125	4	5	6	6
5	0.25	7	5	4	4
6	0.50	8	5	5	1
7	1.00	1	6	1	1
8	2.00	2	1		
9	4.00		1		
10	8.00	1	1		
Total No. Of					
Determinations		25	24	24	24
Average Concentration					
Determined Geometrically		.38	.43	.11	.09
Average Concentration					
Determined Arithmetically		.77	.69	.24	.15

TABLE 8. — Febrile Response: Time Required for Temperatures to Return to Normal in 104 Cases of Pneumonia Treated with Single Injection Daily of Potassium Penicillin in Peanut Oil and Beeswax.

Time By Hours	All Cases of Pneumonia		Cases Etiology known (68 Pneumococcic 2 Streptococcic)		Cases Etiology Unknown	
	Cases	Percent	Cases	Percent	Cases	Percent
Before 24 Hours	25	24	21	30	4	11.76
24 to 48 Hours	27	26	18	25.71	9	26.47
48 to 72 Hours	12	11.5	7	10	5	14.7
After 72 Hours	36	34.6	21	30	15	44.12
Deaths	4	3.84	3	4.28	1	2.94
Total within						
72 Hours	64	61.5	46	65.7	18	52.94
Totals	104	100.00	70	100.00	34	100.00

RESULTS

The prerequisite to an evaluation of any antibacterial agent is, of course, a study of sensitivity of the organism to the agent and concentration of the agent in the blood. It has been shown¹⁴ that if penicillin levels equal or surpass the amount of penicillin needed to induce bacteriostasis in vitro, clinical response should be relatively favorable, achieving complete arrest of the infection in most cases. Both the clinical response and the penicillin levels in this series of patients corroborate the observation, as will be seen by the following data.

Penicillin Levels in Plasma.—The single injection of the total daily dose of potassium penicillin in a suspension of oil with a dispersion of beeswax produced persistingly adequate concentrations of the drug throughout twenty-four hours. Only seven (6.6 percent) of the 122 determinations made twenty-four hours after an injection showed less than 0.03 and 0.01 units per cubic centimeter of plasma. Since the minimum amount of penicillin to which pneumo-

cocci are sensitive is between 0.03 and 0.01 units per cubic centimeter of plasma, this lowest concentration recorded still has some therapeutic value. The geometric average of penicillin concentrations determined at the twenty-four hour interval was 0.10 units. This is considered to be considerably more than sufficient to inhibit organisms sensitive to penicillin. The fluctuation of levels shown in Table 6 taken at varied intervals are probably due to variation in the rate with which the penicillin was absorbed.

Although Table 6 includes data from more than three times as many patients as Table 7, the average levels of ill patients twenty-four hours after injection (0.10 and 0.23 units) is appreciably higher than those of so-called normal patients (0.09 and 0.15 units). It is inferred from noting the higher levels in patients with infectious disease (Compare Table 6 with Table 7) that the absorption of penicillin is prolonged by elevated body temperatures. The mechanism of such a phenomenon is not clear; further experiment with local heat at the site

TABLE 9. — Analysis of 104 Cases of Pneumonia Showing Occurrence by Age Groups and Deaths According to Age.

Age	Total Cases		Deaths	
	No.	Percent	No.	Percent
Under 30	15	14.4	0	0
30 to 39	29	27.9	0	0
40 to 49	29	27.9	2	1.9
Total under 50	73	70.2	2	1.9
Over 50	31	29.8	2	1.9
Totals	104	100.00	4	3.8*

*2.74% of patients under 50 years old, whereas 6.45% of patients over 50 years old died.

TABLE 10. — Complications in 104 Cases of Pneumonia of Which Four Terminated in Death.

Complication	Cases		Deaths
	No.	Percent	
Cardiovascular Renal Dis.	1	.96	1
Pleural Effusion	13	12.5	1
Empyema	1	.96	1
Acute Pericarditis	1	.96	
Pneumococcic Meningitis	2	1.92	1
Toxic Hepatitis	2	1.92	
Paralytic Ileus	1	.96	
Totals	21	20.18	4 (3.8%)

of injection may elucidate this point. The lower levels noted in patients without infectious diseases (Table 7) are still in excess of the concentration required to inhibit most organisms sensitive to penicillin, including practically all types of pneumococci.

Clinical Response.—The febrile response of patients to the form of therapy under study is shown in Table 8. In the entire series of 104 patients, temperatures of twenty-five (24 percent) returned to normal within twenty-four hours. This number includes 30 percent of patients with pneumonia of known etiology and 11.76 percent of patients with pneumonia of undetermined etiology. Twenty-seven patients (26 percent) of the series responded in twenty-four to forty-eight hours, including 25.7 percent of patients in the first group and 26.47 percent in the second. Temperatures of 64 patients (61.5 percent) returned to normal within seventy-two hours, representing 65.7 percent of patients in the first group and 52.9 percent in the second. Thirty-six patients (34.6 percent) remained febrile for more than seventy-two hours, including 30 percent (21 patients) of those in the first group and 44.12 percent (15 patients) in the second.

Of the 36 patients remaining febrile for more than seventy-two hours, all but six were found on physical examination to have an associated disease or a complication of pneumonia which contributed to the continued fever. Most serious of the complications or associated diseases were pleural effusions in five patients; pneumococcal meningitis, acute pericarditis, suspected tuberculosis, chronic bronchiectasis and cirrhosis of the liver in one patient each; marked senility in a person 83 years old, and chronic alcoholism and delirium tremens in two patients each.

It is difficult to ascertain whether the complications were resultant from therapy or were secondary to factors related to severity of illness. It is likely that any other therapeutic agent from the one used in this study could not have reduced the incidence of complications. In studies of oral administration¹ previously mentioned, 31.3 percent of the patients did not respond satisfactorily after seventy-two hours of treatment.

It is encouraging to note that most of the patients remaining febrile for twenty-four to

seventy-two hours after institution of therapy showed clinical improvement such as decreased malaise, improved appetite and a general feeling of well being.

Toxic Reactions to Potassium Penicillin.—Systemic toxic reactions to potassium penicillin in a suspension of peanut oil and beeswax were not noted in this study. A generalized rash appeared in one of the 104 patients on the fifth day of treatment. He stated, however, that he had had similar rashes on previous occasions which were associated with febrile diseases of any etiology. It therefore was assumed that his rash bore no direct relation to the penicillin. All other reactions were of a local inflammatory nature at the site of injection and no abscesses occurred. There were no reactions of sufficient severity to cause interruption of therapy.

Romansky^{7a} reported one patient out of a series of seventy-five who showed sensitivity to cutaneous and patch tests with all constituents of penicillin in the beeswax-oil mixture. This sensitivity was due to penicillin. Gay¹⁵ suggests that beeswax dispersed in peanut oil should be an ideal medium for delaying the absorption of penicillin owing to its poor antigenic properties.

Complications and Mortality.—Four patients in this series died, all persons over 40 years old. Two were between 40 and 49 years old, and two were over fifty. Hence, the mortality rate of the series was 3.8 percent, which is lower than those reported following the use of sulfathiazole (12.7 percent) and crystalline penicillin administered parenterally (11.1 percent)¹⁶, combined penicillin and sulfadiazine (6.7 percent)¹⁷, sulfapyridine (4 percent)¹⁸, sulfadiazine (9.6 percent)¹⁹ and sulfamerazine (9.5 percent)²⁰.

Romansky^{7a} reported no deaths in a series of 42 cases of pneumococcal pneumonias treated with penicillin in oil. He did not mention, however, the number of patients under fifty. Kinsman and associates^{7b} reported no deaths in 20 cases of pneumococcal pneumonia, even though seemingly inadequate doses of penicillin in a beeswax-oil mixture were given by single injection daily. It is important to note, however, that their series was comprised of vigorous young adults in whom therapeutic agents less

efficacious than penicillin would probably have been successful.

Of the four patients in this series who died, pneumococci were isolated by the culture method in three (4.28 percent of cases of known etiology) while causative organism was unidentified in the fourth.

An appraisal of factors surrounding death shows that in the first patient there was evidence of meningeal involvement on admission and that therapy was instituted on the seventh day of illness. Type II pneumococci were cultured from the blood, and it was later proved that he had a true pneumococcal meningitis. The second patient demonstrated type II pneumococci and began penicillin therapy on the third day of illness. Bacteremia set in, and despite two days of specific therapy he died with paralytic ileus and an empyematic pulmonary cavity 1.5 by 3 inches (3.8 by 7.6 cm.) on the right side. An abscess in the right ureter was also demonstrated at necropsy. The third patient in the group of known etiology was 83 years old with type V pneumonia of multilobar distribution and bacteremia noted on admission. This patient presented evidence of chronic emphysema, cardiovascular renal disease and bilateral symmetrical gangrene of the fingers which was not identified at necropsy.

The fourth patient, in whom causative organism could not be isolated, was 26 years old. Treatment was started on the fourth day of his illness, and seven days later he died suddenly and unexpectedly. Pleural effusion on the right side was suspected on admission. Necropsy was not performed. It was believed that pneumonia was not the primary cause of death.

COMMENT

The levels of penicillin concentration determined at various intervals following the single daily injection of potassium penicillin, is considered adequate evidence that the form of penicillin used and the method of therapy are efficacious in the treatment of varied pneumonias. Toxic reactions were negligible and certainly did not exceed reactions noted after use of other therapeutic agents or forms of penicillin.

The only inhibiting factor to the method of therapy (total daily dose given in a single intramuscular injection) is the cost of preparing penicillin in a mixture suitable to retard

absorption and the local inflammatory reaction at the site of injection. Advantages of the method over its alternatives exceed the disadvantages: serious toxic reactions accompanying chemotherapy are eliminated; frequent disturbance of the patient necessitated by the method of oral administration or that of parenteral administration which involves frequent injections is avoided.

The choice of potassium penicillin seemed to be a wise one in view of the fact that toxic reactions to therapy were negligible. Also and of primary importance, the results were good. The premise that its high potency permitted greater proportionate amounts of the factor retarding absorption, which is known to be beeswax, seems to be justified in view of the high concentration levels obtained following injection.

It is suggested by this study that re-evaluation of the patient is indicated if fever persists beyond seventy-two hours after the institution of therapy. The occurrence of complications, presence of concurrent diseases or disrupted immunologic processes of the body may likely be contributing factors in delayed response to therapy.

In evaluating the efficacy of potassium penicillin given by this method of administration, it is believed that the mortality rate in the study series (3.8 percent) is not a significant factor, as none of the deaths resulted from typical uncomplicated pneumonia. It is of course possible that empyema which apparently hastened the death of one patient may have been avoided with more specific therapy or with larger doses of penicillin. Such a conclusion is difficult to establish, however, as it is not known whether the empyematic cavity was present on admission. Because the patient died on the second day of hospitalization, there was not time to complete examinations which would have determined this matter, as complete study of the patient usually requires two to three days. In the other three deaths complications already described are believed to be satisfactory explanations of death exclusive of therapeutic method used.

Discounting the mortality rate in this series in consideration of the attendant circumstances more favorably corroborates results of the present study with the experience of Kinsman and Romansky⁷, both of whom reported no

deaths in their separate series of cases of pneumonia treated with penicillin in oil.

SUMMARY

The efficacy of potassium penicillin G in a suspension of peanut oil with a dispersion of beeswax was investigated in treatment of 104 patients with pneumonia admitted to Cook County Hospital. The method of administration selected was intramuscular injection once daily of 1 cc. of mixture containing 300,000 Oxford units of penicillin.

Clinical response was good, with temperatures of 61.5 percent of patients returning to normal within seventy-two hours. Levels of penicillin concentration were determined at intervals following injection in 88 patients of the series and in 25 other patients without demonstrable infectious disease. Almost all determinations in both groups showed more than adequate penicillin levels to effectively combat organisms causing pneumonia. There were no significant toxic reactions in the series.

The mortality rate of 3.8 percent, was somewhat discounted by the observation that in each death there were associated diseases or complications of pneumonia which qualified the conclusion that pneumonia was the primary cause of death.

Because of the incidence (32.7 percent) of concurrent diseases and the presence of complications in all patients who died, it is concluded that failure to respond to treatment after seventy-two hours of therapy necessitates re-evaluation of the patient.

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Streptomycin and Penicillin In Febrile Obstetric and Gynecologic Conditions

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The physicians who graduated twenty-five or more years ago have observed the onset of a medical science revolution which is in full progress today. The most prophetic did not foresee the great changes that would come. From the development of insulin to the radioactive substances of today has meant that many teachings of the past were discarded and the new concepts substituted. The practicing physician had as little time to keep abreast with scientific progress by reading and postgraduate work as did those who did the teaching and research. Indeed, medical faculties have been hard pressed to maintain their academic position. It is not the mastering of the new therapeutic application as such that has been difficult but to acquire full knowledge of the action on immunological alteration, the alteration in the pathologic picture and tissue responses and the change in medical and surgical treatments.

Twenty years ago puerperal infections accounted for over a third of all puerperal deaths. At that time some sixty-odd women out of every 10,000 live births lost their lives from infection. Nowadays, with the correct use of sulfonamides, penicillin and streptomycin along with proper aseptic technic, fatalities from infection in gynecologic and obstetric patients have been very greatly reduced. It has been advocated that the use of penicillin in labor would prevent febrile courses and extend the time for major operative procedures such as cesarean section. The rapidly increasing frequency in which penicillin was used is now history. Attempts to use small dosages and simple routes of administration have been tried thousands of times by the physicians throughout the country. Fortunately

there existed an extremely wide range of safety to penicillin and also fortunately bacteria did not develop resistance too rapidly to this antibiotic. Even so, Miller (C.P.) and colleagues in their several reports and others have demonstrated that bacteria do become resistant to penicillin.

Streptomycin was introduced to the profession by a better educational preparation, and although new, its value as well as that of penicillin are now established. Some bacteria develop resistance to streptomycin rapidly, illustration of which will be presented later. Streptomycin can cause serious toxic manifestations in the patient (dermatologic reactions and eighth nerve injury). When the vestibular branch is involved the patient may have balance disturbance for a variable period. The auditory branch may be involved to the extent of permanent damage. The eighth nerve complication is more likely after a week or more of treatment. The total dosage is not necessarily a factor. Evidence is available that these complications are less likely today due to elimination of impurities. (Since this talk was given dihydrostreptomycin has been found to be safer.)

For review, the following indicates the limitations and usefulness of penicillin and streptomycin. (See Table 1.)

Even though many smaller hospitals are not equipped to do complete diagnostic bacteriology, every effort should be made to determine the offending organism, and frequently the degree of susceptibility to penicillin and streptomycin should be established as a guide for therapy.

Infection in the obstetric patient is usually of the endometrial zone. From this point the invaders may remain localized, may pass into the blood stream, pass directly to the peritoneal cavity or form abscesses in the parametrium. Infections in the urinary tract may mask the picture. It should be remembered that pyuria in the postpartum patient may result from injury

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Read before the 108th annual meeting, Illinois State Medical Society, Chicago, May 10-12, 1948.

TABLE 1

PENICILLIN AND STREPTOMYCIN HAVE THE FOLLOWING THERAPEUTIC VALUES FOR THE ORGANISMS AND CONDITIONS LISTED AS VIEWED OBSTETRICALLY AND GYNECOLOGICALLY

	Penicillin	Streptomycin
Hemolytic streptococci	++++	++++ if penicillin resistant
Staphylococcus	++++	++++ if penicillin resistant
Clostridia	++++	
Pneumococcus	++++	
Gonococcus	++++	++++ if penicillin resistant
Anaerobic streptococcus	— to ++++	++?
Other anaerobic bacteria	— to ++++	?
Klebsiella pneumonia		++++
Hemophilus influenzae		++++
Escherichia coli		++++
B. aerogenes		++++
Syphilis	++++?	
Actinomycosis	+++?	
Bacterial endocarditis	++++	
Urinary tract infections		++++ usually*
Pneumonia	++++	+++?
Peritonitis	+++ together	+++
Endometritis	++++?	++++?
Puerperal mastitis	++++	

*Not in presence of stone, catheter, obstruction or retention.

to the bladder wall during parturition or by overdistention and that pus cells on bladder catheterization and cystitis postpartum are not proof of pyelitis.

Cultures from the uterine cavity and blood stream can be taken easily. A direct smear from the uterus may indicate the probable offender.

TABLE 2

PENICILLIN FOR PROPHYLACTIC VALUE IN CERTAIN OBSTETRIC COMPLICATIONS, 1945-46

	Postpartum		Total
	Afebrile	Febrile	
Prolonged labor	10	1	11
Prolonged ruptured membranes	11	1	12
Duhrssen's incisions	14	4	18
Intrauterine pack and exploration	5	2	7
Intrauterine bag	1	0	1
Intrapartum fever	1	1	2
Totals	42	9	51
		(17.7%)	

Multipara 13 Primipara 38
Average labor 28 hours
Fetal death 6: 3 stillborn, 3 neonatal

From Hesseltine and Kephart

Para-amino benzoic acid and penicillinase can be used respectively to neutralize sulfonamides and penicillin if these medications have been started before cultures were taken. It must be emphasized that there is not a satisfactory agent to neutralize streptomycin; hence bacteriologic studies should be instituted before streptomycin is utilized.

TABLE 3

CONTROLS FOR PENICILLIN PROPHYLACTIC GROUP; NO PENICILLIN OR OTHER AGENT USED TO PREVENT INFECTION 1943-45

	Postpartum		Total
	Afebrile	Febrile	
Prolonged labor	5	3	8
Duhrssen's incisions	38	7	45
Intrauterine pack and exploration	12	0	12
Totals	55	10	65
		(16.4%)	

Multipara 15 Primipara 50
Average labor 32 hours, 25 minutes
Fetal death 2: 1 stillborn, 1 neonatal

From Hesseltine and Kephart

TABLE 4

CONTROLS FOR PENICILLIN PROPHYLACTIC GROUP; NO PENICILLIN OR OTHER AGENT USED TO PREVENT INFECTION 1934-35

	Postpartum		Total
	Afebrile	Febrile	
Prolonged labor	2	0	2
Dührssen's incisions	32	16	48
Intrauterine pack and exploration	8	4	12
Intrauterine bag	2	1	3
Intrapartum fever	0	2	2
Totals	44	23	67

(34.3%)

Multipara 13 Primipara 54

Average labor 40 hours, 42 minutes

Fetal death 10: 7 stillborn, 3 neonatal

From Hesseltine and Kephart

A special study (Hesseltine and Kephart) was made on prophylactic use of penicillin and streptomycin in patients in long labor, those treated by Dührssen's incision, intrauterine pack and other treatments commonly followed by a febrile course.

Table 2 shows a promising result for penicillin in 25,000 U. every three hours. It was started after 24 hours of labor when delivery was not imminent or after Dührssen's incision, intrauterine pack or like procedures were instituted. A control (Table 3) was for the period immediately preceding this time. It will be noted that there is no particular significance in the results. However, when (Table 4) a corresponding period of a decade back was collected, an appreciably higher febrile rate was discovered. There are other factors to consider, as the average length of labor was longer, blood loss was probably greater, blood transfusions were less frequently used, and the use of parenteral fluids was less common. Perhaps a larger dosage of penicillin might have given a different result.

Streptomycin in doses of 0.3 gram every three hours was used under the same trial conditions (Table 5). It appears that streptomycin (calcium chloride complex) in this slightly smaller series was more valuable than penicillin. Perhaps a larger series would alter the picture.

According to the observation of Hite and Hesseltine some of the bacteria which invade the uterus during labor or immediately after-

TABLE 5

STREPTOMYCIN FOR PROPHYLACTIC VALUE IN CERTAIN OBSTETRIC COMPLICATIONS 1947-48

	Postpartum		Total
	Afebrile	Febrile	
Prolonged labor	10	2	12
Dührssen's incisions	12	0	12
Intrauterine pack and exploration	7	2	9
Intrauterine bag	1	0	1
Intrapartum fever	8	0	8
Totals	38	4	42

(9.5%)

Multipara 12 Primipara 30

Average labor 19 hours, 35 minutes

Fetal death 8: 7 stillborn (3 antepartum, 1 previable)
1 neonatal

From Hesseltine and Kephart

wards are quite susceptible to penicillin. This applies particularly to the strict anaerobes. A synergetic relationship of certain bacteria isolated from puerperal uteri has been demonstrated. It is conceivable that the elimination or retardation of one might benefit the patient. On the other hand, if the organism retarded was an antagonist, then a pathogen could become more dangerous to the patient.

The spectacular responses after the administration of penicillin or streptomycin have been observed by all of us at times; then other times the anticipated response fails to take place. Penicillin in doses of 50,000 U. every three hours eight times daily has reduced the incidence of suppurative mastitis when treatment has been instituted early (within 12 to 24 hours from the first symptom). Whether 300,000 to 600,000 U. daily in the newer oil preparation will be as effective only time will tell. When suppuration has occurred or is inevitable, penicillin is still valuable in the localization of the abscess and in aiding the healing process after adequate drainage. Penicillin therapy may be followed within 24 to 72 hours by a normal temperature, a normal white count and general improvement even with a well-localized abscess present in the breast.

Female gonococcal infection of the lower tract can be treated usually successfully by two grams (0.5 grams four times per day) sulfadiazine daily for six days. It reduces office visits, does not

incapacitate nor involve hospital expense. In most instances penicillin clears the infection in a matter of 12 to 24 hours. However, resistant strains produce a different picture. Penicillin in adequate amounts gives a very rapid relief in salpingitis, and when given early, should help to conserve tubal function.

The general tendency to use penicillin freely for all postpartum fevers and in gynecologic febrile courses is common knowledge. Penicillin therapy will not necessarily prevent a pyelitis or *B. coli* bacteremia. Case (D.C.) demonstrated this failure clearly. The patient had a placenta previa. Penicillin was started before delivery and continued postpartum. The *B. coli* organisms were isolated from the blood stream from a culture taken postpartum. The graph after the institution of streptomycin is very satisfactory.

Infected abortions are still problems before us. Penicillin has been very valuable in some. Case K.H. had an anaerobic streptococcus in the uterine cavity. After four days of penicillin therapy the patient was steadily becoming worse. The penicillin was continued, but streptomycin was added to the treatment program. Within five days the temperature and pulse graph had become normal.

Another infected abortion, M.H., who was most critical at one time due to a generalized peritonitis, an intestinal obstruction at the splenic flexure of the large bowel, and a pelvic abscess. It was necessary to relieve the obstruction by colostomy. The pathologic picture was most unusual. Except for two or three small pockets at the pelvic inlet, the cultures from the abdominal cavity were negative. The parietal and visceral peritoneal surfaces were relatively dry, but adherent throughout. An anaerobic streptococcus and a bacteriodes were isolated from the pelvic abscess. This patient's recovery cannot be credited to the antibiotic alone but to their continued use, 21 units of blood and plasma, proper fluid balance and complete therapy of all complications.

It should be emphasized that streptomycin is contraindicated in urinary tract infections, except under the most pressing circumstances, when there is a renal stone, indwelling catheter, urinary retention or blocked urinary tract. These points reported by others are confirmed by one of our observations. In a span of seven days a strain of *B. aerogenes* developed a resistance from 2.6 U. of streptomycin to over 2,000 U. per c.c. This organism is probably totally resistant to streptomycin and may remain so for the rest of its existence.

It is routine practice at The Chicago Lying-in Hospital to give 0.5 gram sulfathiazole four times daily to all patients that have a retention catheter. There are very few instances of drug intolerance, and pyelitis postoperative and postpartum from faulty bladder function has been practically eliminated.

CONCLUSIONS

Streptomycin and penicillin are extremely valuable therapeutic aids in obstetrics and gynecology. Sufficient amounts must be given and given over an appropriate period of time. Parenteral route is the only acceptable one in obstetric and gynecologic complications.

Other therapies must be employed also (blood transfusions, fluids, relief of bowel distension, drainage of abscesses and other routines).

The antibiotics do not extend obstetric and gynecologic conditions for major surgery beyond the present accepted standards.

These agents, for greatest efficiency, must be used in adequate amounts, in proper dosage and time intervals, and by the appropriate route.

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Subarachnoid Hemorrhage

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Subarachnoid hemorrhage of so-called spontaneous or non-traumatic origin has only recently become of surgical importance. The increasing interest of surgeons in this condition is due to the recognition that a patient who survives an attack of subarachnoid hemorrhage is very likely to have further and eventually fatal attacks. The refinements of arteriography and its increasing use as a diagnostic tool have further interested the surgeon in the treatment of intracranial vascular lesions.

Aside from trauma and the extension of an intracerebral hemorrhage into the subarachnoid space there are numerous possible causes for the appearance of blood in the cerebrospinal fluid. Cookson² lists them as arteriosclerosis, congenital defects (aneurysms), lues, septic emboli, sterile emboli, angiomas, blood dyscrasias, acute hemorrhagic infections, sunstroke, eclampsia, tumors and cysts, and thrombosis of the superior longitudinal sinus. While relatively small amounts of blood may appear in the cerebrospinal fluid at times in the conditions listed above, it has been fairly well established that grossly bloody spinal fluid in the great majority of cases means rupture of a cerebral blood vessel, usually an aneurysm or an angioma or an angiomatous malformation, rarely hemorrhage from a brain tumor. Angiomatous malformations may be divided into simple telangiectases or capillary loops, venous angiomas and arterial or arteriovenous angiomas. The latter two are more likely to give rise to profuse subarachnoid hemorrhage. The clinical recognition of vascular malformation of the brain is difficult. The initial symptom is most often a convulsion, which may be Jacksonian in type, especially if the lesion is in or near the motor area. Subarachnoid hemorrhage frequently occurs but cannot be differentiated clinically from that seen with ruptured or leaking aneurysms. Progressive neurologic disturbances may be noted, especially unilateral hemiplegia or hemiparesis, or hyper-

reflexia with pathologic reflexes. The occurrence of convulsions with progressive neurologic disturbances may lead to air studies. These may not be diagnostic at all or may show slight distortion or displacement of the ventricles as these congenital vascular anomalies tend to compress cerebral tissues locally without gross displacement of the hemisphere or its ventricle.

McDonald and Korb⁹ reviewed the literature of intracranial aneurysm to 1938 and assembled 1125 cases of saccular aneurysm of the arteries at the base of the brain. In 1023 cases in which the location of the aneurysm was known the internal carotid or one of its branches was involved in 774 cases (75 per cent) and the vertebral or basilar arteries or their branches in 249 cases (25 per cent). These saccular aneurysms have been described by Baker as being of four types, the arteriosclerotic, the mycotic, the luetic, and the congenital. The saccular aneurysms of the arteries of the base of the brain are not to be confused with the small miliary aneurysms of the cerebral vessels that are often responsible for intracerebral hemorrhage.

The role that arteriosclerosis plays in the formation of saccular aneurysm is a disputed one. McDonald and Korb⁹ found that of 572 cases in the literature in which the arteries at the base of the brain were described, that the vessels were considered arteriosclerotic in 283 (49.5%). However, it is very probable that critical examination of many of these cases would show that the arteriosclerosis was coincidental and that the aneurysms were really congenital in origin. This is especially likely, since after the age of forty about three-fourths of the reported cases are said to have arteriosclerosis.

However, it must be admitted that arteriosclerosis may be an important factor in the production of these aneurysms and consequently in subarachnoid hemorrhage. Unfortunately, the vessel and aneurysm is often so badly destroyed at the site of the hemorrhage that it is difficult,

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if not impossible to determine the original cause of the weakness in the vessel wall.

Mycotic emboli may either occlude completely a vessel or on adherence to its wall, especially if infective, so weaken it that a local dilatation takes place. Valvular heart disease is the most common cause of these aneurysms. Of the 572 cases of McDonald and Korb⁹ already referred to, mycotic emboli were reported in 70 (12.2%).

Lues as a cause of cerebral aneurysms is less important and has been denied entirely by some investigators. Bassoe¹, however, reported two cases of syphilitic aneurysm of the vertebral artery, both with repeated episodes of subarachnoid hemorrhage and both proved at necropsy to be syphilitic in character. Again the possible coincidental occurrence of congenital aneurysms and syphilitic involvement of other vessels must be kept in mind. McDonald and Korb⁹ found evidence of syphilis reported in only 32 (5.6%) of their series. The proportion was about the same at all ages. It is probable that lues is a rare causative factor in the aneurysms of the larger vessels of the base of the brain.

The origin of the congenital saccular aneurysms of the circle of Willis and its branches has been described in detail by Forbus⁵. He studied, by means of serial sections, a case of multiple aneurysms as well as cases of normal arteries and found that normally there are muscular defects in the media of the cerebral arteries in the portion of the vessel wall at the angle of bifurcation. He, therefore, considered cerebral aneurysms as acquired lesions arising from focal weakness in the vessel wall, namely the congenital defects in the muscularis referred to above. Degeneration of the internal elastic membrane occurs at this point. He never found muscle fibers in the wall of the sac of the aneurysms. The congenital aneurysms are, therefore, always to be found at the point of bifurcation of the vessels. Since many of the bifurcations of the vessels at the base of the brain are at right angles or nearly so, there is an extra strain thrown on the vessels at this point by the pressure of the circulating blood. Some authors have used this as an explanation of the greater frequency of aneurysms at these points. This may of course be a factor in the production of the so-called congenital aneurysms which it has been seen are really acquired, but based on a congenital weakness of the vessels at their bifurcations.

Deal and Maurer⁴ found 0.5% of 2880 post mortem examinations of the head to have an intracranial aneurysm. Martland⁸ found 54 cases (2.2%) of ruptured intracranial aneurysm in 2500 autopsies. He stated that two per cent of sudden deaths are due to this cause.

Unruptured intracranial aneurysms are usually not recognized unless of large size. The classical syndrome as described by McKinney and his associates¹⁰ is unilateral exophthalmos with homolateral involvement (partial or complete) of the second, third, fourth, fifth, and sixth cranial nerves. The third and fifth nerves are always involved, the others usually so. Roentgenograms of the skull may show bony destruction of the sella on the side of the lesion with or without linear streaks of calcification in the aneurysm. The most frequently involved cranial nerve is the oculomotor. The development of paresis or paralysis of this nerve, especially in a young person should arouse suspicion of an aneurysm of the internal carotid artery.

The diagnosis of subarachnoid hemorrhage depends on the recognition of its possibility by the examiner and the use of diagnostic lumbar puncture. The mode of onset ranges from mild headache to sudden coma. At times with relatively slight bleeding there may only be headache, irritability, dizziness and perhaps nausea and vomiting. These cases may pass unrecognized unless some cranial nerve palsy is present or unless a spinal puncture is done.

Signs of meningeal irritation with stiff neck, positive Kernig and Brudzinski signs, pain in the back or legs, and fever of varying degree are very important in the diagnosis. It is not uncommon for patients with spontaneous subarachnoid hemorrhage to be admitted to a contagious hospital because of the predominate signs of meningeal irritation. There, of course, spinal puncture soon reveals the true situation. However, subarachnoid hemorrhage may occur without signs of meningeal irritation. Savitsky¹⁴ was able to report seven such cases. There was only one death in this group. Necropsy showed the subarachnoid hemorrhage to be due to rupture onto the surface of an extensive subcortical cerebral hemorrhage. Marked restlessness with at times severe delirium is not uncommon. The patient may be confused and disoriented for a considerable time.

Convulsions are not uncommon and may be the initial symptom of the bleeding. According to Mills and Horton¹¹, they occur more frequently in cases where the aneurysm involves the anterior part of the circle of Willis or its branches. The seizures may be repeated in cases of intermittent leakage.

Mills and Horton¹¹ likewise found that signs of involvement of the pyramidal tract and of peripheral sensory disturbance were found more often in aneurysms of the anterior group of intracranial vessels. Marked hemiparesis or hemiplegia is usually associated with hemorrhage from an angioma but may indicate either a primary intracerebral hemorrhage with rupture into the subarachnoid space or ventricle or an aneurysm which has ruptured into the base of the brain with dissecting clot. One such case in the writer's experience was of an aneurysm of the anterior communicating artery which ruptured into the third ventricle. Blood then reached the subarachnoid space by way of the ventricular system.

Cranial nerve palsies are very frequent after rupture of aneurysms; they occur also beforehand in some cases as already referred to. The oculomotor is the most frequently involved nerve; next in order of frequency are the abducens and facial nerves. The other cranial nerves may be involved variously at times but usually in combination with one or more of those already mentioned.

Hemorrhagic extravasations into the retina about the optic discs and into the vitreous have been described as frequently associated with subarachnoid hemorrhage by a number of authors including Wagener and Foster¹⁶. According to these authors they are the most common ocular findings, outranking oculomotor palsy in this respect. They concurred with Riddoch and Goulden¹³ in the belief that the intraocular hemorrhages were caused by interference with the return flow of venous blood from the retina and central vein at the point at which it leaves the optic nerve and enters the dural sheath. In the cases of Wagener and Foster¹⁶, papilledema, while much less common, was usually associated with retinal hemorrhages.

On the other hand, Griffith and his associates⁶ carried out experimental studies which tended to show that blockage of the perineural spaces of the optic nerve with erythrocytes was a factor

in preventing the development of papilledema. These authors collected 118 cases from the literature of subarachnoid hemorrhages in which ophthalmologic examination had been performed. There was some degree of papilledema in 24 (20%) of these cases. They reported eleven cases of their own with no papilledema in any case.

It is probable that the infrequent occurrence of papilledema indicates that it is not due to changes in the cerebrospinal fluid pressure but to direct effects upon the optic nerves by the hemorrhage or the aneurysm itself.

Nystagmus was stated by Mills and Horton¹¹ to be more frequent in aneurysm of the posterior part of the circle of Willis and its branches. Disturbances of speech occurred in aneurysm of both the anterior and posterior branches in the experience of these authors.

Examination of the spinal fluid is very important in establishing the diagnosis. It was not until lumbar puncture came into general use as a diagnostic measure that subarachnoid hemorrhage was diagnosed clinically in other than rare instances. The appearance of the fluid ranges from mild xanthochromia to gross blood, depending on the amount of hemorrhage and the period of time that has elapsed between the onset of symptoms and the performance of the lumbar puncture. Xanthochromia appears within forty-eight to seventy-two hours after the occurrence of the bleeding. In cases of massive hemorrhage it may be necessary to centrifuge the fluid or to allow the erythrocytes to sediment out by standing in order to demonstrate xanthochromia in the supernatant fluid. Rarely blood or xanthochromia may be absent from the fluid. This is only when the aneurysm ruptures into the cerebral substance without entering the subarachnoid space or when the increase in intracranial pressure blocks the drainage of the cerebrospinal fluid from the base of the brain so that blood does not reach the lumbar subarachnoid space.

The treatment of spontaneous subarachnoid hemorrhage in the past has been essentially symptomatic with rest. In mild cases control of the headache with mild analgesics or codeine sulphate, ice bags, and rest are all that are indicated. If there is excessive restlessness or delirium more sedation in the shape of barbiturates or paraldehyde will be necessary. In cases of stupor or coma, special nursing care is necessary with attention to the bowel and rectum, changing the

position of the patient frequently to prevent hypostatic complications and to allow for adequate care of the skin, and provision for adequate fluid intake and nutrition. If the patient cannot take adequate fluids by mouth (either because of coma or because of difficulty in swallowing due to cranial nerve paralysis) it is necessary to make special provision for the rectal, subcutaneous, or intravenous administration of fluids. In the writer's opinion, five per cent glucose in distilled water is the best solution to use. The indiscriminate administration of large quantities of isotonic sodium chloride solution to comatose patients with intracranial lesions is unnecessary and at times may be positively harmful. Whenever a patient is comatose or stuporous for more than three to four days it is usually best to put a nasal catheter into the stomach or duodenum and give nasal feedings of high vitamin, high caloric, liquid diet. This also provides for the administration of oral medication.

The intravenous administration of hypertonic solutions for the purpose of reduction of intracranial less pressure is usually contra-indicated because of the temporary rise in blood pressure associated with such administration. Increased intracranial pressure in these cases should be controlled by saline cathartics or enemas or by spinal drainages.

The use of spinal drainages in the treatment of subarachnoid hemorrhage is of debatable value. As Sprong¹⁵ has shown it is of little use as far as the removal of blood from the spinal fluid is concerned. At times the drainage of fluid may be of symptomatic value in the control of headache or restlessness. However, the principal role of spinal puncture is that of diagnosis and as a check on whether further bleeding is taking place. The persistence of red blood cells in the spinal fluid after a few days indicates repeated or continuous leakage of blood with correspondingly poor prognosis.

Hamby⁷ has recently reported on the outcome in 130 cases of spontaneous subarachnoid hemorrhage. There was a mortality of 45 per cent in the first attack. Of the survivors 72 per cent succumbed in a second attack. The overall mortality was 63 per cent. Only 17 per cent of the group survived without serious neurologic sequelae.

These figures dramatically point the need for the development of adequate treatment for these

patients, treatment that will either remove or lessen the risk of further hemorrhage. Surgical treatment of aneurysms may consist of simple ligation of the internal carotid, trapping of the aneurysm between a ligature on the carotid in the neck and an intracranial clip, clipping the neck of the aneurysm or extirpation of the aneurysm. The choice of methods depends on the location of the aneurysm and its form, whether pedunculated, sessile or fusiform.

While some neurosurgeons, notably Dandy³ have advocated a direct attack on intracranial aneurysms without cerebral angiography, most agree that a logical attack cannot be planned without preliminary visualization of the aneurysm.

Since the pioneer work of Moniz¹² on roentgenographic visualization of the arteries of the brain, neurosurgeons have gradually made increasing use of arteriography, especially in the diagnosis of vascular lesions. Thorotrast has been used widely, but because of the objections to the injection of a radio-active substance that is not excreted by the body, diodrast is now being more widely used. While the vertebral artery can be injected so as to visualize the arteries of the posterior fossa and posterior part of the circle of Willis, the technique is difficult. Surgical treatment of the aneurysms of the posterior half of the circle of Willis is much more difficult and often impossible. Fortunately the majority of intracranial aneurysms are on the internal carotid artery or its branches. This vessel can be injected in the neck by either a percutaneous technique or after open exposure of the vessel. The percutaneous or closed method is more difficult but after practice can usually be accomplished. It has the advantage that in the absence of localizing signs first one side and then the other can be injected without subjecting the patient to repeated surgical procedures.

Satisfactory arteriograms cannot be obtained without close cooperation between the roentgenologist and the operator. The timing of injection and exposure has to be perfect and until both roentgenologist and operator have had considerable experience there will be frequent failures.

In the author's experience a surprising number of arterial angiomas or arterio-venous malformations have been disclosed by arteriograms after subarachnoid hemorrhage. This coincides

with the report of Wechsler and Gross¹⁷ who reported ten cases of arteriography with diodrast. Six of these had vascular malformations, four had aneurysms. These lesions can sometimes be extirpated surgically, especially when superficial in location, but direct surgical attacks are hazardous both to life and neurologic function. Internal carotid ligation has been advised by some but does not appear to offer the advantages that it does in aneurysm. The pulse pressure in the multiple anastomosing channels of the angioma or arteriovenous anomaly is already low and carotid ligation is not likely significantly to affect it. In aneurysms on the other hand, especially of the circle of Willis, the reduction in pulse pressure produced by carotid ligation may be of great value in reducing the likelihood of rupture or leak. Roentgen therapy seems on the whole to be the most promising method of treatment of the angiomas and arterio-venous anomalies.

The following case reports illustrate the possibilities of definitive treatment of cases of subarachnoid hemorrhage.

Case 1, M. G., a 37 year old white woman had had severe headaches for three weeks. After a week she developed a right oculomotor paralysis. The day that she was seen she suddenly became comatose with left hemiplegia. The spinal fluid was grossly bloody. Ophthalmoscopic examination showed multiple fresh retinal hemorrhages in both eyes.

She slowly improved and six weeks later a right cerebral arteriogram was carried out. This revealed a fusiform aneurysm of the internal carotid artery

lateral to the optic chiasm. It appeared that this aneurysm might be trapped intracranially between clips. Four days later a right transfrontal craniotomy was carried out. The right optic nerve was displaced medially and superiorly by a fusiform swelling of the internal carotid artery. Clips were placed on either side of the swelling and the wound closed.

The patient made a satisfactory recovery. After operation there was, for a time, left homonymous hemianopsia but this gradually disappeared as did her other objective neurologic findings. Three and one-half years later she was well, there had been no further episodes of subarachnoid hemorrhage and neurologic examination was negative.

Case 2, E. D., a 38 year old white woman after premonitory headaches for two weeks became suddenly comatose. Her left eye deviated laterally and there was a right Babinski sign at the onset. Spinal fluid examination revealed grossly bloody spinal fluid. The optic fundi a week after the onset showed bilateral elevation of one to two diopters and many recent retinal hemorrhages. She gradually recovered and six weeks later a left cerebral arteriogram revealed a fusiform aneurysm of the left middle cerebral artery, just distal to the origin of the anterior communicating artery (Figure 1). This was obviously not suitable for direct attack and a week later, after the patient had tolerated occlusion of the internal carotid artery without symptoms for thirty minutes it was ligated in continuity. She made an uneventful recovery and eighteen months later was perfectly well.

Case 3, W. M., a 54 year old white man had four years before suffered a sudden attack of unconsciousness followed by right hemiplegia and aphasia. Spinal puncture revealed grossly bloody spinal fluid. He slowly recovered, but at the time of examination had slight hesitancy in speech with occasional difficulty in finding the word he wanted to use. There was



Figure 1: Lateral arteriogram. Note enlargement of middle cerebral artery at its origin from the internal carotid.



Figure 2: Lateral arteriogram. There is a tangled group of small arteries just posterior to the sphenoid ridge and below the first part of the anterior communicating artery.

slight incoordination with hyper-reflexia of the right extremities.

Left cerebral arteriography (per-cutaneous) demonstrated an arterial angioma of the left Sylvian fissure (Figure 2). He was given a course of high voltage roentgen therapy. Two months later he was remarkably improved, both subjectively and objectively. There were no abnormal neurological findings and the speech difficulty was entirely cleared up. This marked improvement after four years could hardly be considered as spontaneous and was thought to be due to the roentgen therapy.

Case 4., E. M., a 26 year old white woman had had headache and had been dull and lethargic for two months. Five days before, after severe headache she was unconscious for two hours. Headache had persisted and vomiting had been present since; the spinal fluid three days before had been blood tinged. She had moderate weakness and hemi-hypesthesia of the left side of the body, including the lower part of the face. The weakness and hypesthesia was most marked in the upper extremity. There was a left Babinski reflex and the optic fundi were blurred and slightly elevated.

The patient slowly improved and the optic discs became normal in appearance. A month later, a right cerebral arteriogram was carried out. This revealed an angled mass of vessels in the anterior part of the Sylvian fissure extending deep into the hemisphere (Figures 3 and 4). Direct communication of these vessels with cerebral veins could be seen. The impression was of an arterio-venous angioma.

The patient was given a series of high voltage roentgen therapy. A few months later she became pregnant and had a normal child born by Cesarean section. This latter was advised to obviate the physical exertion of labor. A year after she was first seen she had two Jacksonian seizures beginning in the left side of the face and involving the left extremities as well. She



Figure 3: Lateral arteriogram. The angioma in the posterior frontal region has direct communication to the cerebral veins.

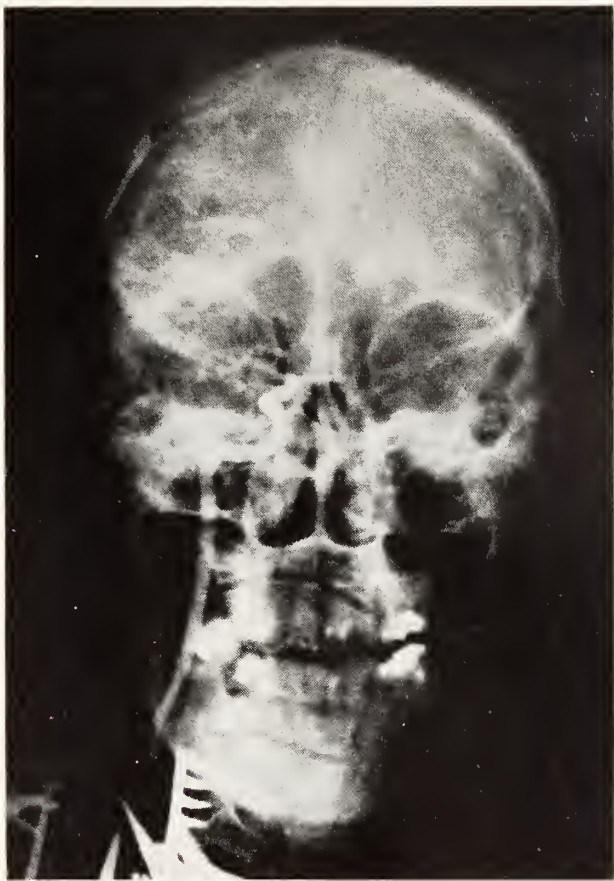


Figure 4: Anteroposterior arteriogram (same case as Figure 3) The lesion lies deep in the hemisphere.

was then placed on small doses of phenobarbital. Two years after the onset she was well and had had no further seizures. Neurological examination was entirely negative and the optic fundi were normal in appearance.

Case 5., B. E., a 31 year old white woman was seven months pregnant. Following a severe occipital headache she lost consciousness. On regaining consciousness she was nauseated, vomited and had twitching of the fingers of the right hand. The next day there were no positive neurological findings, but the spinal fluid was grossly bloody.

She steadily improved. Two months later a normal child was delivered by Cesarian section. Six months after the onset she returned for an arteriogram which was carried out on the left side. This revealed a large mass of dilated vascular channels in the left temporal lobe. A large anomalous vein connected this mass of blood vessels to the lateral sinus. (Figures 5 and 6). This lesion did not appear suitable for surgical intervention and she was given high voltage roentgen therapy. Two years later she had remained well with no further complaints.

Case 6., C. D., a 30 year old white woman was first seen because of headache and vomiting of eight days duration. Spinal puncture revealed grossly bloody spinal fluid. Her symptoms cleared up and she left the hospital. Two weeks later she returned with recurrence of headaches, ptosis of the right eye and



Figure 5: Lateral arteriogram. Note the very large venous channel connecting the angioma to the lateral sinus.

hypesthesia in the right trigeminal distribution. Surgical exploration through a right transfrontal approach was advised, but the patient refused to submit to this. Again her symptoms cleared up and she was discharged.

Sixteen months later she returned with a right oculomotor paralysis, severe headache, and vomiting. The spinal fluid was again bloody. During the next three weeks she had three episodes of further bleeding, each confirmed by lumbar puncture. At that time we felt arteriography was not safe, probably an unwarranted opinion. Because of the repeated episodes of subarachnoid hemorrhage, the right internal carotid artery was exposed. After thirty minutes compression had failed to produce symptoms, it was ligated in continuity.

The patient's progress was uneventful from this time on but the right oculomotor palsy was still present on dismissal from the hospital. Eighteen months later, she was in excellent general condition with no subjective complaints except diplopia. There was persistent partial paralysis of the right oculomotor nerve, but no other neurologic abnormalities could be elicited.

It is apparent that this patient's life was saved by carotid ligation. In retrospect if arteriography and surgical treatment has been carried out at the time of the initial episode, this patient might have been spared the permanent oculomotor paralysis which she now has.

In the past I have been very conservative, waiting three to twelve weeks after an episode of spontaneous subarachnoid hemorrhage before carrying out arteriography. In the light of further experience this conservatism seems unwarranted and I now carry out cerebral arteriography early after the initial hemorrhage. It appears that it can be safely carried out within

a few days after the initial hemorrhage. In cases that show repeated or continuing bleeding, this procedure should not be delayed as surgical intervention may be life saving.

CONCLUSION

Spontaneous subarachnoid hemorrhage is a serious condition with a very unfavorable prognosis. Even if the patient survives the initial attack the danger from further episodes of hemorrhage is great. Cerebral angiography is as indispensable in the diagnosis and exact localization of the responsible lesion as spinal puncture is in the initial diagnosis of the presence of the subarachnoid hemorrhage. The roentgenographic visualization of the causative lesion makes definitive treatment possible in many cases.

We owe these unfortunate patients every effort to establish a diagnosis and to treat them so as to lessen or obviate the risk of further episodes of hemorrhage.

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Figure 6: Anterior posterior arteriograms (same case as Figure 5). The arteriovenous angioma is deep in the hemisphere.

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Acute Intrapartum Inversion Of The Uterus

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Inversion of the uterus is a rare and dramatic accident of labor in which the uterus turns inside out and upside down, the uterine fundus dropping into the passive lower segment and thence into or through the cervix. According to the older textbooks, the condition is rare indeed, being variously reported as occurring from 1 in 100,000 deliveries to none in 250,000. There is considerable reason for believing that the condition occurs much more frequently than this. Curtis¹, in his Textbook of Gynecology "states" that there has been so much emphasis on mismanagement of the third stage of labor as a cause of inversion that many men have failed to report cases occurring in their practices. Daro² and his co-authors cite a personal communication from Kobak stating that the records of the Chicago Department of Health show 7 deaths due to inversion of the uterus in 94,000 deliveries, only 2 of which had been diagnosed before autopsy. Naturally, these figures give no idea of the num-

ber of acute inversions occurring during the same period in which the patients survived. Phaneuf³ mentions a case of inversion which had been under the daily observation of 2 physicians for a period of 2 months without recognition of the pathology, while Barrett⁴ reports a patient who had been observed for 14 weeks, during which time she had had 2 perineal repair operations without a diagnosis of inversion having been made. The likelihood that many unrecognized or unreported cases occur and the numerous case reports appearing in the literature of the past 2 decades lead one to suspect that inversion of the uterus is much more frequent than is generally supposed. Curtis¹ places the incidence at about 1 in 6,000 deliveries. Torpin⁵ reports that 13 cases occurred in 72,000 private deliveries in the State of Georgia exclusive of the University Hospital, but that no cases occurred in 21,000 consecutive deliveries at the University Hospital, a combined incidence of 1 in 8,000 deliveries. Harer⁶ reports an incidence in one Philadelphia hospital of 1 in 740 deliveries. In our community, 3

Presented before the 108th annual meeting, Illinois State Medical Society, Chicago, May 10-12, 1948.

cases occurred in the course of 5,000 hospital deliveries, an incidence of 1 in approximately 1,700 cases.

The mortality rate in cases of inversion of the uterus is usually considered to vary from 15% to 40%. In the cases to be reported the mortality rate is 50%. Certainly, it is an important cause of maternal death. In spite of the emphasis placed upon mismanagement of the third stage as an etiological factor, inversion can occur spontaneously. Thus, anyone who practices obstetrics may be called upon to treat such a case. Unfortunately, there is no standardized treatment, and there is wide divergence of opinion as to management of these cases.

Inversions of the uterus occasionally occur in nonpregnant women, usually as a result of extrusion of a pedunculated submucous uterine tumor; the vast majority of inversions are obstetrical. Obstetrical inversions may be classified as traumatic or spontaneous. Anatomically, they may be classified as complete, in which the inverted fundus passes through the cervical ring, coming to lie in the vagina; they may be incomplete, when the fundus is indented but is retained within the uterine cavity; or they may be complete with prolapse where the inverted fundus passes through the introitus and lies outside the vagina. Kellog⁷ classifies inversion according to whether or not constriction of the cervix has occurred, as acute, subacute or chronic. In his acute variety, inversion has occurred within a matter of minutes and the cervix has not yet clamped down on the inverted fundus. It is in this type that reposition is most easily accomplished. In the subacute type, constriction has occurred; while in the chronic group the patient has survived the initial shock and the inversion persists for days or weeks.

Various factors are thought to predispose to inversion of the uterus. Some abnormality of the reciprocal innervation of the uterus has been postulated, as has irregular or segmental contraction of the fundal musculature. Softening of the uterine muscle underlying the placental site is thought to play a role. Cooke⁸ likens the mechanism of inversion to that of intestinal intussusception. Perhaps the most graphic description of the pathogenesis was given by Jones⁹, who wrote "After any portion of the

uterus becomes indented to a considerable extent, the rest of the organ seizes this invaginated portion as it would grasp a foreign body, and, in attempting to expel it, turns itself inside out."

According to Torpin⁵, age, parity or the use of oxytocic drugs prior to completion of the third stage seem to play no part in the production of inversion. In the traumatic variety, inversion is thought to result from a combination of the following factors:

1. Fundal implantation of the placenta
2. Adherent placenta
3. Traction on the cord or short cord
4. Overenthusiastic manipulation of the fundus while it is relaxed
5. Attempts at manual extraction of adherent placenta situated in or near the fundus
6. Deep general anesthesia.

Clinically, inversion of the uterus is recognized by disappearance of the suprapubic mass, sudden onset of profound shock, entirely disproportionate to blood loss, and the appearance in the vagina of the inverted uterus. The profound shock is probably explained by the serious distortion of anatomic relations which occurs in complete inversion; as the fundus drops downward it carries with it round ligaments, tubes, ovaries and proximal broad ligaments with their blood vessels and nerves, forming a sac into which intestine may herniate. The placenta may remain attached or may come away, in which case bleeding is likely to be profuse. Eventually, contraction of the cervix produces a tourniquet-like effect which if sufficiently prolonged may lead to gangrene of the inverted part. Infection is almost a certainty because of direct bacterial contamination of the traumatized uterine mucosa.

Authorities disagree as to the sequence of treatment in these cases. Blood transfusions given rapidly and in large volume are essential. The difficult problem is to decide when to attempt reposition. In some of these cases the patient does not collapse when the uterus inverts, but only after manipulation has been attempted. If the condition is immediately recognized, there are a few minutes' leeway during which gentle replacement of the inverted fundus can easily be accomplished, and we have no doubt that this has been successfully done in many home deliveries. If this golden opportunity is lost and the patient collapses, all efforts must be directed

toward improving her condition, and manipulation of the inverted uterus should be avoided. During this stage bleeding can be at least partly controlled by the insertion of a tight vaginal pack. Only when massive transfusion of blood is in progress and after the patient begins to show clinical improvement should any attempt at replacement be made. Numerous writers^{10, 11, 12, 13, 14} advise against making any immediate attempt, Vartan¹⁵ reporting 8 cases of spontaneous reposition following packing alone. However, there are a few cases who will not respond to antishock therapy until replacement is accomplished. This point was emphasized in a recent paper by Henderson¹⁶ who replaced an inverted uterus in a nearly moribund patient dying while transfusion was in progress, securing immediate clinical improvement. Commenting editorially on Henderson's report, Eastman says that cases of early inversion should be replaced immediately and that the late cases which have recovered from the shock phase (Kellogg's "chronic" type) should be dealt with surgically. The group in between, first seen 15 minutes to 6 hours after the accident occurs, are the patients which pose the problem; it is in this group that deaths occur, and most authorities advise conservative management. Yet, some patients are lost by the orthodox method of treatment who might be salvaged by reposition. In other words, the "hands off" policy may be carried too far. Unfortunately, no one has been able to tell us how to differentiate between the patients who will respond favorably to replacement and those whose demise will thus be hastened.

Huntington, et al^{17, 18}, advocating abdominal replacement of the inverted uterus, cite 7 cases all but one of whom were in shock when subjected to operation. All improved immediately following reposition, and all survived.

Cosgrove¹⁹ favors immediate vaginal replacement and states that the passage of time after inversion is as important as in ruptured appendix or strangulated hernia. We usually would not care to attempt replacement unless blood were going in through 2 and probably 3 extremities, and with the patient showing clinical improvement.

Reposition is usually not difficult unless a cervical constriction ring has occurred. Pressure with the fingertips around the neck of the herniation will usually discover some point at

which replacement may be started. It should be carried out in the reverse order from its formation, namely, lower segment first, and then progressively corpus and fundus, the fingers following through until the uterus is completely reposed. About halfway through this replacement, the abdominal hand can be effectively used to hold the gains already made, and support the reverting uterus while the uterine hand is completing the replacement. Some writers do not feel that uterine packing is necessary, but we feel much safer with the pack in place, since it tends to prevent recurrence of the inversion — a circumstance which has been reported. Oxytocic drugs should, we feel, be reserved until reposition has been accomplished and the uterine cavity packed. Prior to this they have no particular effect on bleeding and may considerably complicate matters by producing cervical constriction.

Various procedures have been suggested to relieve the constriction ring which eventually seems to form in these cases, among them deep ether anesthesia, spinal or caudal anesthesia and adrenalin. None of these is calculated to improve the condition of a patient in shock, not even adrenalin which was formerly used in the treatment. The latter drug does, however, have a relaxing effect on the cervical constriction ring. Daro² and his associates recommend doses of 10 or 15 minims, and in our first case we felt that cervical relaxation was obtained by a smaller dose. It should be borne in mind, however, that our primary objective is to secure a living patient and not to produce immediate reposition of the uterus. Therefore, the mechanical difficulty should not be too aggressively treated until the patient's condition warrants it.

We report herewith 4 cases of inversion which my associates and I were called upon to manage. The first case occurred during our residency and is used by permission of Dr. Willard M. Allen, Professor of Obstetrics and Gynecology at Washington University School of Medicine. The other cases were seen in consultation in private practice. We do not present them as examples of ideal management, but because we have learned much from them, and hope that their presentation will be of value to others.

Case No. 1. (Mrs. E. G.) The patient was a 19 year old primigravida at term after an uneventful prenatal course. Following a normal 9 hour labor at St. Louis

Maternity Hospital, she was delivered by a member of the house staff, with outlet forceps and episiotomy, under chloroform anesthesia. 10 minutes later the intern-anesthetist announced that the placenta was "ready"; the uterus had contracted and there was a show of blood. Downward pressure on the fundus was made with the flat of the hand in an effort to complete the third stage. The placenta appeared in the lower vagina and the anesthetist stated that the uterus felt "bicornuate". The placenta was delivered and the membranes were adherent to a completely inverted uterus. There was very little bleeding and the patient did not go into shock until an attempt was made unsuccessfully to replace the uterus. The resident was called. The vagina was tightly packed and transfusion was ordered. The hospital had no blood bank at that time and one hour and 5 minutes elapsed from the time of inversion until blood transfusion was started, the patient receiving glucose in the meanwhile. 25 minutes later, with the patient still in shock, though receiving blood, the resident and attending man removed the pack and found the cervix contracted down around the inverted corpus. Epinephrine hydrochloride, $\frac{1}{2}$ cc., was given and there was definite relaxation of the constriction. The uterus was reposed and the cavity tightly packed. The patient expired 45 minutes later, or 2 hours and 30 minutes after the inversion had occurred, with transfusion still in progress.

Several points seem to be brought out in this case: first, management of the third stage is the function of the obstetrician — not the anesthetist; second, while the diagnosis of inversion was made immediately and with the patient in good condition, the intern was inexperienced and was unable to repose the uterus; the resulting unsuccessful manipulation sent the patient into shock; thirdly, the patient was not adequately treated for shock when packing was removed and the reposition accomplished. Epinephrine hydrochloride seemed to have had a relaxing effect on the cervical constriction.

Case No. 2. (Mrs. N. A.) This patient was a 28 year old gravida ii para i who had been seen by her doctor regularly throughout her pregnancy and had presented no abnormalities. She delivered at term at Alton Memorial Hospital after an uneventful labor. After waiting 9 minutes the doctor attempted to deliver the placenta by a combination of squeezing the uterus through the abdominal wall and marked traction on the cord. With delivery of the placenta the patient began to bleed furiously and after 10 minutes the pulse was imperceptible and the anesthetist was unable to obtain a blood pressure reading. Plasma was started and the vagina tightly packed. Consultation was called an hour and a half later and the patient was found still in profound shock and oozing through the vaginal packing. No vaginal examination was made at that time but more plasma was given while blood was being obtained. She was then given a total of 3,000 cc. of citrated blood through 3 extremities. During administration of the last liter of this massive transfusion, the pulse could be counted at 132 and the blood pressure

was recorded at 72/30. The patient was then prepared and draped for vaginal examination and anesthetized with nitrous-oxide and ether. Packing was removed and a complete inversion of the uterus found. Reposition was accomplished and uterine cavity tightly packed. The patient remained in borderline shock for the next 12 hours but her condition steadily improved and she was discharged in good condition on the thirteenth postpartum day. She has been seen several times during the $2\frac{1}{2}$ years which have elapsed and she is in good health. She has not attempted another pregnancy.

Case No. 3. (Mrs. E. M.) This patient was a 21 year old gravida ii para i who was delivered at St. Joseph's Hospital, on March 4, 1946. Prenatal course and labor, according to her physician, were entirely normal, with the exception that the patient had been anesthetized with drop ether for about 15 minutes during the second stage pending the doctor's arrival. A full term normal female infant was delivered spontaneously at 4:47 P.M. 18 minutes later, the uterus being well contracted, the doctor expressed the placenta in the usual manner without undue manipulation or traction. The placenta appeared promptly in the vagina but it was attached to a completely inverted uterus. The placenta was manually removed and an unsuccessful attempt at reposition was made. During this procedure the patient collapsed, and when first seen by one of us 30 minutes later was in profound shock. Plasma was started, and one hour after the inversion had occurred transfusions were being given in the veins of both feet and the left arm. Bleeding through the vaginal packing was profuse, and the transfusions were producing no significant improvement in the patient's condition. Because of this, the patient was prepared for vaginal examination and anesthetized with cyclopropane. The vaginal packing was removed, a completely inverted uterus was found and there was no constriction ring. Reposition of the uterus was not difficult and was carried out rapidly followed by a tight packing of the uterine cavity and the administration of intravenous ergotrate. Blood transfusion was continued but the patient's condition did not change, the pulse being rapid and weak and the blood pressure impossible to obtain. By midnight the patient began to develop pulmonary edema, which was treated with hypertonic glucose in small quantities. 9 hours after reposition there was some improvement and the patient responded to her name; by the following morning the pulse was stronger and the color improved, but the improvement was transitory. While the patient momentarily regained consciousness about noon, she sank rapidly and expired 15 minutes later.

Unlike the second case, there was no history of trauma in the management of the third stage in this patient. The attending physician was a man of long experience in obstetrics who is conservative in his management of cases. The practice of anesthetizing patients during the second stage in order to delay delivery for the doctor's arrival is a widespread evil which, however, is not believed to have contributed to the inversion, inasmuch as rhythmic uterine contrac-

tions were re-established after the doctor's arrival. In retrospect this patient might have fared better had reposition been delayed and an attempt made to control hemorrhage by repacking the vagina.

Case No. 4. (Mrs. N. H.) This patient was a 31 year old gravida ii para i who had had a perfectly normal prenatal course, according to her doctor. She was admitted to St. Joseph's Hospital in January, 1948. After an uneventful, rather short labor, the patient was delivered of a normal full term male infant. After delivery one ampule of ergotrate was given intravenously. Following this, an attempt to express the placenta was unsuccessful. Repair of the episiotomy was completed and another attempt was made to deliver the placenta. This was followed by moderate bleeding, and 2 more attempts were made to express the placenta at 5 minute intervals. The last attempt was very forceful and consisted of squeezing the uterus through the abdominal wall and making marked traction on the cord, to the extent that the cord was partially torn away from the placenta at its insertion. Following this, the placenta margin appeared at the introitus and a nurse, attempting to palpate the fundus reported that it could no longer be felt. Deep transabdominal pressure and cord traction were again applied in an attempt to deliver the placenta, again without success. Consultation was then called, and examination at 4:30 revealed complete inversion of the uterus with the placenta still partially adherent. There was considerable bleeding. The patient was in shock, the blood pressure barely obtainable at 40/0, and the pulse varied from 150 to 160, very weak and thready. By the time the consultant arrived, plasma had been started and crossmatching was in progress. Transfusion was begun at 4:50. The patient's condition improved somewhat following the administration of the transfusion, and under cyclopropane anesthesia the placenta was removed and the fundus replaced in the usual manner without great difficulty. The uterine cavity was then tightly packed and ergotrate was given intravenously. Following the administration of 4 units of plasma and 750 cc. of citrated blood, the patient's blood pressure had returned to 110/70 and she had a rather severe chill lasting for 2 minutes, during which the transfusion was discontinued. The patient had been reported to be group A Rh positive by the laboratory, and she had received 500 cc. of group A Rh positive blood, followed by 250 cc. of group O Rh positive blood at the time the transfusion reaction began. In the hours following transfusion she developed rather marked suppression of urine, and the baby, which had been turned over to a pediatrician, developed severe anemia, and expired 36 hours after delivery with a diagnosis of erythroblastosis. On re-examination of the mother's blood, she was found to be group A Rh negative. The patient slowly improved and was able to return to her home about 2 weeks after delivery.

Like case number 2, this was a traumatic inversion in which repeated forceful attempts to express the placenta were made. Intravenous ergotrate was given immediately after delivery of the baby. Whether or

not its use contributed to an abnormal third stage mechanism is speculative.

COMMENT

Judging from the ease reports in the literature, and from our own experience, inversion of the uterus as a complication of delivery is much more frequent than some of the obstetrical textbooks would lead one to believe. The authors have had personal knowledge of 2 other cases of inversion, both of which occurred in an obstetrical teaching institution. Both were the private patients of experienced obstetricians, specialists in their field. Therefore, we feel that this accident can happen to anyone, and that its occurrence is not necessarily the result of obstetrical incompetence, as Cooke⁸ unequivocally states. However, we cannot deny that overly aggressive management of the third stage and attempts to hurry its completion are responsible in many instances for this dramatic accident. There is some reason for believing that the incidence of inversion is rising, and if this is true it is time for those of us who do obstetrics to return to the time-honored principles of management of labor — especially the third stage of labor. One of the authors was recently called upon to review the histories of 30 consecutive patients delivered by the same doctor. 10 of these women had postpartum hemorrhage, and one can only conclude that his management of the placental stage leaves something to be desired. In recent years articles have appeared advocating new techniques resulting in shortening of the third stage of labor. The published results have been excellent, but for most of us it is best to spend a little more time and await natural separation of the placenta before attempting to deliver it.

As to treatment, the authors are convinced the inverted uterus should be immediately reposed if the condition is recognized at the moment of its occurrence. However, if the patient has gone into shock no manipulation should be attempted beyond tight packing of the vagina until multiple blood transfusions are in progress, and then only if the patient shows improvement. When the patient is in shock and the placenta is still attached to the fundus, it is probably best to make no attempt at removal. We believe the oxytocic drugs should not be given following inversion until replacement has been accomplished and the uterine cavity tightly packed.

Massive transfusion of blood is the sine qua non in management of these cases.

SUMMARY

- 1. 4 cases of acute inversion of the uterus are presented. The mortality rate was 50%.
 - 2. The incidence of inversion, as an accident of labor, appears to be higher than stated in some textbooks; there is evidence that the incidence is increasing.
 - 3. More conservative management of the placental stage of labor should be practiced by most obstetricians.
 - 4. If inversion is recognized at the moment of its occurrence, immediate reposition seems to offer the best outlook for the patient; if shock supervenes, vaginal packing and massive blood transfusion are in order until there is definite clinical improvement.
- 205 West Third Street.

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FAULTY EATING HABITS CAUSE OF HEARTBURN

Heartburn, the burning discomfort associated with digestive upsets, is often caused by faulty eating habits and emotional disturbance and tension, say two Philadelphia doctors.

Writing in the January 29 issue of The Journal of the American Medical Association, Henry J. Tumen, M.D., and Edwin M. Cohn, M.D., of the Graduate School of Medicine, University of Pennsylvania, and the Jewish Hospital, point out that heartburn is not a symptom of ulcer or "overacidity" of the digestive system.

Nearly three fourths of the 46 patients treated for heartburn by the doctors found that the discomfort was worse during periods of emotional

strain. Thirty four of the group were substantially improved by a program of education in eating habits and discussion of emotional and personality problems.

Patients were advised to eat slowly and at properly spaced meals and to avoid the habits of getting most of the day's food at one large meal, drinking excessive fluids with meals, and eating foods that seemed to cause heartburn.

Although foods described by patients as causing the condition were mostly fats, sweets, and spices, the specific foods to be avoided vary with the individual, the doctors emphasize. Coffee, onions, cabbage, and chocolate were found to be outstanding examples of such specific foods.

Swallowing air in drinking carbonated beverages or in chewing gum may be a contributing factor to heartburn, the article suggests.

CASE REPORTS



Constrictive Calcified Pericarditis In A Diabetic

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Rockford**

Chronic constrictive pericarditis, although well described in the medical literature^{1 to 4}, is rarely encountered in practice. As a result of some previous infection or inflammatory reaction in the pericardium a slow, progressive fibrosis results, often with considerable calcification, that produces a constricting influence on the diastolic excursions of the heart and occasionally also interferes with the systole. In many cases no definite past history of acute pericarditis is obtainable. Current authors^{1, 3a, 4}, while stating that rheumatic fever is practically never the cause of chronic constrictive pericarditis, mention under etiology: tuberculosis, pneumococcic, staphylococcic, streptococcic infections and unknown factors. The disease which usually manifests itself

with clinical symptoms of right heart failure, may eventually result in additional left heart failure. Diagnosis can be difficult and may be missed in absence of a thorough investigation. In the latter case, conservative treatment for cardiac decompensation on the basis of other, more common, forms of heart disease, or for cirrhosis of the liver, can only be palliative, while after a correct diagnosis the indication is surgical (pericardectomy) with a far better prognosis.

The following case is reported because of its peculiar combination of classical and unusual features from onset to convalescence.

R.L., a white male, married, age 33 years, an inspector at a local factory, was first seen at the office (E.B.) on Nov. 16, 1946. Chief complaints: swelling of both feet, legs and thighs, swelling of the abdomen, shortness of breath and weakness which had become acutely worse during the last

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3 days. Diabetes mellitus had been diagnosed in 1939 and treated since with insulin and diet which the patient had disregarded recently. Besides, domestic management had been badly neglected through the years because the patient had been running his Benedict test (5 cc) with only 3 drops of urine. During 1943 he became dyspneic, exhausted and noticed that his abdomen became distended. Lower extremities started swelling in 1944. Rest always reduced these symptoms considerably. During 1943 he was hospitalized for thrombophlebitis (left thigh) and an ulceration of the left leg. In October 1944 and November 1945 he was hospitalized again and told that, besides diabetes, he had valvular heart disease of rheumatic origin and a liver congestion. Chest x-rays had not been taken. Past history was negative for rheumatic fever, acute pericarditis, pneumonia, tuberculosis and venereal diseases.

Physical examination: A pale and dyspneic patient, having moderate back pain at the level of the 1st and 2nd lumbar vertebrae. Height 5' 10", weight 179 lbs. Temp. 99°, pulse 100, resp. 20-22. Face puffed. Right glass eye (accident, age 16). Left eye: sclera subicteric, pupil round, reacting to light slowly. Lips moderately cyanotic, tongue dry. Neck: jugular vein congestion. Chest: thorax well developed, skin and musculature emaciated. Percussion revealed a distinct area of dullness in the region of both pulmonary bases and a moderate enlargement of the heart to the left. On auscultation the heart action was fast (100/min.) and of regular rhythm, the apex beat pounding; no friction rub, no valvular murmurs heard. Blood pressure 120/90. Abdomen: distended and edematous; ascites present; liver quite enlarged and tender; spleen not palpable. Genitals edematous. Both lower extremities quite swollen and edematous. Both patellar reflexes unobtainable. Urine test (at office:) Sugar > 4%, albumen 2 +, diacetic acid +.

The patient was hospitalized immediately with a working diagnosis of diabetic acidosis, decompensated heart disease and passive congestion of the liver with ascites.

Essential information from previous hospital files: (1) ECG- report (10-10-1944): "Frequent ventricular premature contractions. First stage A-V block. Rate 135. Right axis deviation. P waves frequently merged with T waves,

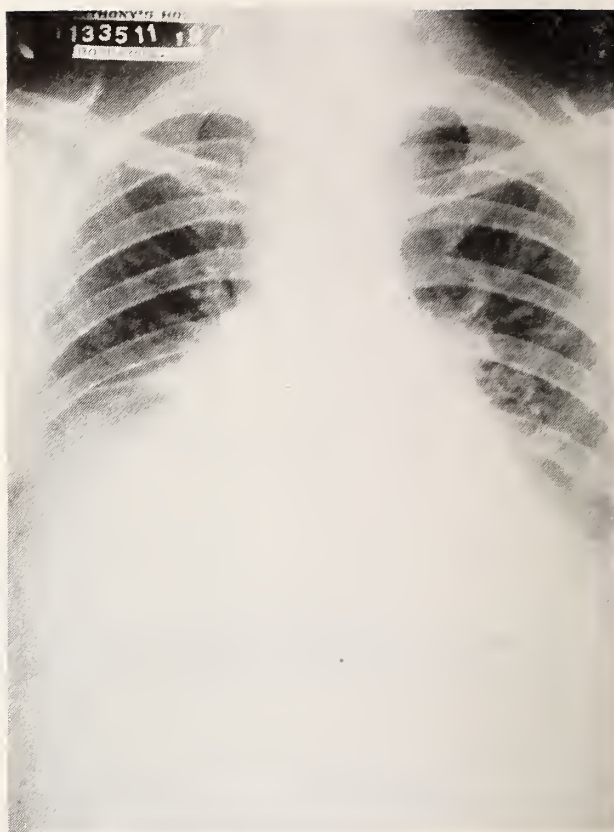


Figure 1: 11-19-1946

but occasionally appear on the down stroke of the T wave. P_3 inverted. R_1 low and slurred. T_1 low and diphasic. T_3 inverted and fails to turn upright on deep inspiration. T_4 varies considerably in amplitude, but for the most part is upright. PR 0.20-0.23. QRS 0.08. Impression: Indicates chronic right ventricular strain, the most common cause of which is mitral stenosis, but congenital heart disease is also a possibility. The combination of tachycardia and first stage A-V block strongly suggests an active rheumatic infection which should be ruled out by observing the temperature and sedimentation rate. *Electrocardiogram suggests a rather serious cardiac condition which deserves careful study.* — (2) Blood sedimentation rate (10-14-1944): Cutler 16 mm/60 min.; Westergren 18 mm/60 min. Interpretation: slightly active. — (3) Temperature readings: (Oct. 9 through 18, 1944) 97° — 98°. — (Nov. 30 through Dec. 4, 1945): 97° — 99.5°.

During our attendance at the hospital the essential diagnostic laboratory findings were:

(11-16-1946) Blood sugar (on admission): 265 mg%; (11-16) Urine: (in the evening, after

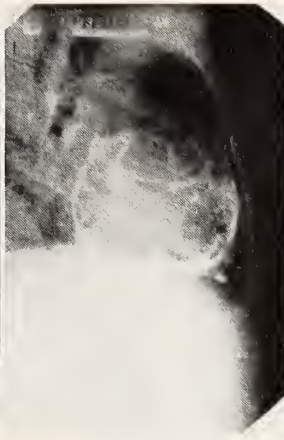


Figure 2a and 2b: 11-27-1946

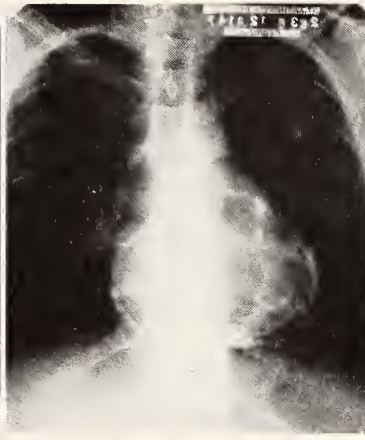


Figure 3a and 3b: 12-31-1947

first insulin dosis) albumen trace, sugar $11\frac{1}{2}\%$, acetone neg., diacetic neg., sediment: 2-3 W.B.C./h.p.f., otherwise negative. — (11-16) Blood Count: R.B.C. 4,400,000; W.B.C. 7,600; Hb. 14 Gm. = 84%; C.I. 0.95; Diff.: Seg. 63%, Lympho. 32%, Stab. 3%, Mono. 2%. — (11-19): Kahn and Hinton tests neg. — (11-26) Serum Bilirubin: Direct Van den Bergh positive; quantitative = 1.6 mg%. — (12-2) Mantoux test: 1:1000 neg.; 1:100 slightly positive.

The diabetes responded rapidly to treatment and the patient was gradually established on a diet of C 150, P 85 and F 140 (2200 calories) with a daily requirement of 30 units protamine zinc insulin + 15 units regular insulin (before breakfast). The cardiac decompensation also responded well to routine management as long as the patient was hospitalized (bed rest, fluid restriction 1500 cc, digitalis, ammoniumnitrate and mercurial diuretic). Albuminuria cleared up by 11-23. Temperature range was normal. First diagnostic x-ray films of chest and abdomen were taken on 11-19-1946 (69 hours after admission).

Chest (Figure 1): Posterior anterior flat plate. The heart appeared considerably enlarged in toto. In view of the accumulation of fluid in the right pleural cavity and the right interlobar fissure as well as in the base of the left lower chest, it was difficult to appraise the exact size of the heart. The findings were compatible with a pericardial effusion plus bilateral hydrothorax (especially right). Abdomen: Scout plate disclosed a marked uniform enlargement of the liver as well as a considerable amount of free fluid in the peritoneal cavity.

It was noted that the x-ray evidence of a peri-

cardial effusion was not supported by auscultation, and because all fluid accumulations were considered to be congestive, no aspirations of any kind were attempted. By 11-25, after a total of 2.7 Gms. of digitalis, 6 Gms. of ammoniumnitrate and 2.6 cc of Mercupurin had been administered since admission, the total excess of fluid output over intake amounted to 11,200 cc (average d: 1.015) = 25 lbs; (actual loss of body weight: 24 lbs). Edema of lower extremities and ascites had disappeared, pulse rate dropped to 76. The patient was considerably improved. Reray of the chest on the same day (not reproduced here) showed a considerable improvement, inasmuch as the amount of fluid in the pleural cavities was definitely reduced. The cardiac shadow also appeared somewhat reduced in size. Within the confines of the cardiac silhouette a few streaky calcifications strongly suggested an old pericarditis. Two days later (11-27), after additional 0.4 Gm. of digitalis and additional 275 cc excess fluid output, anterior and lateral views of the chest, taken with Bucky diaphragm, revealed a distinct coarse lacework of heavy shadowy lines definitely diagnostic of calcifications within the pericardial sac (Figure 2, a and b). Final cardiac diagnosis: *Chronic constrictive calcified pericarditis of advanced stage, etiology undetermined*; secondary cardiac decompensation and hepatic congestion.

Having been released from the hospital on 12-2-1946 and referred for surgical treatment to Dr. O. T. Clagett, Rochester, Minn., this patient entered the Mayo Clinic on 12-12-1946. (Attending cardiologist: Dr. Robert L. Parker; diabetic supervision: Dr. R. M. Wilder). Es-

sential medical and surgical findings at the Mayo Clinic*:

Preoperative: venous pressure increased to 26 cm water column; hepatic damage as indicated by dye retention, grade 2; serum proteins normal; diabetic neuropathy of lower extremities. ECG: marked lowering of the amplitude of the QRS segments in all leads and shallow inversion of the T waves, a pattern most often found in constrictive pericarditis.

Operative: Pericardectomy on 12-28-1946. Cartilages of the 3rd, 4th and 5th ribs anteriorly, left, were resected, etc. A good sized portion of the anterior pericardium was exposed. The pericardium was indurated, almost entirely calcified and varied in thickness from $\frac{1}{8}$ to $\frac{1}{2}$ inch. The pericardial space was completely obliterated and it was difficult to find a line of cleavage. No pericardial effusion was found. In many places the calcifications extended into the cardiac muscle and it was necessary to leave a calcified area over the surface of the heart. The heart muscle bulged forward freely when the constricting pericardium was turned back. *It was not a healthy looking cardiac muscle, however; it was friable and yellow rather than of the normal beefy red color.* At least half of the pericardium was resected. But posteriorly there was so much reaction and the exposure so poor that the heart could not be freed there. An opening was made from the pericardial space into the left pleural space so that any effusion might drain into this region.

Postoperative: Pathological: surgical tissue specimen negative for tuberculosis. Clinical: auricular fibrillation following surgery, effectively controlled by digitalis administration. After this, digitalis and diuretics were avoided at the Clinic in order to arrive at a proper evaluation of the results of the operation. Venous pressure reduced to 14 cm (a very favorable response). No edema of feet, very moderate amount of ascites at time of dismissal (1-15-1947).

Period of convalescence in Rockford ("R") after Jan. 17, 1947, with 2 control visits at the Mayo Clinic ("M") (March 1 to 6 and Aug. 29 to Sep. 4, 1947):

(a) diabetic: On 9-2-1947 ("M") the diet was increased to C 230, P 104, F 140 (2596 cal.; sodium restriction 0.9 Gm.) with a present insulin requirement ("R") of 35 units protamine

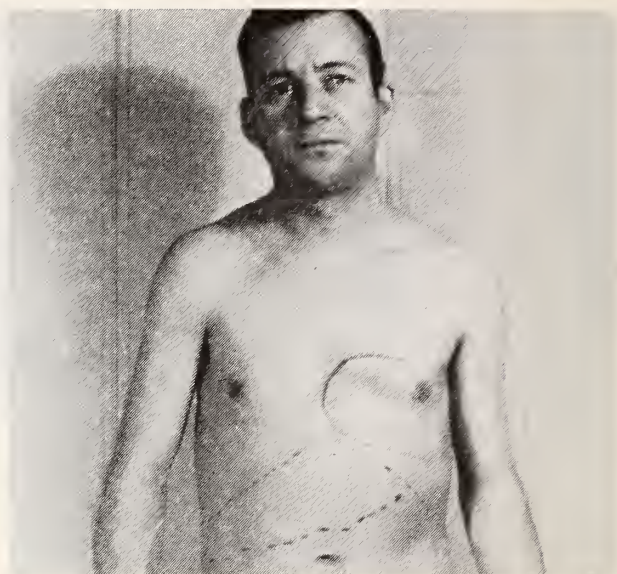


Figure 4: 2-28-1948

Continuous line = operation scar.

Interrupted lines = costal arches and liver margin.

zinc insulin + 15 units regular insulin before breakfast and 5 units regular insulin before supper. Irregular bouts of glucosuria ceased after introduction of a more evenly distributed feeding schedule⁵.

(b) cardiac and hepatic: Fluid restriction 1000 cc. Recurring edema of feet was controlled after reintroduction of digitalis 0.1 Gm., b.i.d., which was later reduced to 0.1 Gm. once daily. Venous pressure ("M", reported 9-5-1947) dropped to 9-10 cm, a sign of further improvement, although still above normal average (6 cm). Chest x-rays ("R", 12-31-1947) still revealed residual pericardial calcifications except anteriorly, from where they had been removed surgically (Figure 3, a and b.).

In September 1947 the patient felt strong enough to resume gradually his inspection work.

Ascites, however, which had kept recurring since January 1947, still needed continuous control by mercurial diuretic. Liver function test in September 1947 ("M", dye retention grade 2) was unchanged and the liver has remained quite enlarged and firm, its margin palpable $4\frac{1}{2}$ in. below the xiphoid process and $3\frac{1}{2}$ in. below the costal arch in the right mamillary line. Diagnosis: *Pick's pseudocirrhosis of the liver* (Figure 4: Photo of 2-28-1948).

Between 1-31-1947 and 1-15-1948 a total of 53 i.v. injections of 2 cc salyrgan — theophylline

*Condensed from letters of Drs. O. T. Clagett and Robert L. Parker, whose permission to quote is gratefully acknowledged.

were administered. Additional administration of potassium nitrate (6 Gms. daily) in March 1947 brought no improvement and was abandoned. Observable beneficial effect from Methionine and amino-acid mixtures in this case was limited to relief from gaseous distension. Then, on 1-15-1948, a druggist who had been instructed to dispense choline dihydrogen citrate solution (Delphicol, Lederle), by oversight issued a liquid preparation of disodium hydrogen citrate (Citralka, Liquid; Parke Davis & Co.). The diuretic effect of this preparation, taken as 15 cc (= 60 grains disodium hydrogen citrate) twice daily, was remarkable and the ascites so effectively controlled that no mercurial diuretics were needed thereafter for more than 4 months. During the following 5 months injections of salyrgan-theophylline again became necessary but only half as frequently as before. It was further noted that, during the administration of disodium hydrogen citrate, edema of the lower extremities did not recur.

COMMENT

(1) In this case of chronic constrictive pericarditis no definite clues as to the specific etiology are available¹. General heart failure was obvious from clinical observation, and pronounced myocardial degeneration plus infiltration by calcifications, as seen during the operation, deserve special mention. This makes the prognosis less favorable than in the majority of the cases where an undamaged heart muscle is reported. It is conceivable that the presence of diabetes mellitus was a contributory factor to the myocardial degeneration; the reported electrocardiographic changes do not contradict early coronary sclerosis in a young diabetic⁹.

(2) X-ray study, if confined to the findings obtained on the first chest film (69 hours after admission), would have failed to disclose the true cause of heart failure in this case because of the considerable amount of fluid present in the chest. Only after the patient was well dehydrated did the pericardial calcifications appear clearly in follow-up x-rays. From the clinical and laboratory evidence we tend to conclude that the nature of the fluid was not that of an inflammatory exudate (e.g. rheumatic or tuberculous polyserositis) but rather a transudate due to circulatory congestion. While the presence of the hydrothorax is undisputed, a pericardial effusion (hydropericardium) as suggested by the

x-ray evidence, was not found at the time of operation. Diagnostic difficulties of evaluating the cardiac silhouette due to thickness of the pericardium or because of pockets of fluid or considerable dilatation of the right auricle^{3b} have been recognized and described^{1, 3a, 4}. We must conclude that the heart was in dilatory failure and that the reduction in size of the cardiac silhouette after institution of cardiac therapy was the result of improvement of myocardial tonus.

(3) In evaluating the observed therapeutic effect of disodium hydrogen citrate⁶ we realize that clinical improvement following pericardectomy may not reach its peak until a year or more has elapsed, but also that in this patient a pseudocirrhosis of the liver had developed. Relief from persistently recurring ascites after administration of this drug was so striking that we attribute the effect to the diuretic (and slightly laxative) action of this drug, in the doses mentioned. (Tri-) sodium citrate and (tri-) potassium citrate are recognised in the literature both for their systemic alkalizing and diuretic effects⁷, but as diuretics they are rarely used nowadays. (Tri-) potassium citrate is also listed under remedies for ascites due to portal cirrhosis⁸. In analogy, disodium hydrogen citrate (the chief constituent of Citralka, Liquid) which so far has been recommended as a systemic alkalizer only, can also be classified under the diuretics.

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COUNCIL MEETING MINUTES



The regular January meeting of the Council was held at the Palmer House, Chicago, on Sunday, January 16, 1949. The following were present, Hopkins, Oldfield, Camp, Hughes, O'Neill, Harker, Hawkinson, Vaughn, Hedge, Blair, Norbury, Hulick, English, Lane, Otrich, Hamilton, Coleman, Berghoff, Neece, Hutton, Neal, Leary, Cross, Hoeltgen, Bornemeier, H. G. Poncher, Warren H. Cole, John A. Rogers, E. H. Weld, E. V. McCarthy, Harry A. Oberhelman, W. J. Gillesby, P. R. Blodgett, Mrs. E. A. Fraser, and Frances C. Zimmer. Minutes of last two meetings approved.

Secretary gave his report referring to duties in his office; discussed the A.M.A. special assessment and how funds were to be handled. Matter of collecting this assessment from Emeritus and Past Service members; should be optional and no pressure brought to bear upon these members. Secretary-Treasurer presented the usual financial report showing receipts and expenditures for past three months. Discussion of several matters presented in the report, with consideration to method of handling the special assessment.

MOTION; Neece-Lane; that report be adopted as a whole. Carried.

HOPKINS reported as president, calling attention to desirability of having a plate made to show congressional and senatorial districts of state, to be used in a folder to be sent to entire membership. By proper action, the Secretary was instructed to procure these cuts and have printing done for the membership at the earliest possible date. Reported on the recent Conference of County and Branch Society officers held in Springfield. Excellent program, free discussions, and everyone present very complimentary. Stressed need for public speakers within the medical profession in every county.

Several Councilors mentioned problems within their respective districts, these of minor character, and all reported excellent cooperation and physicians in general alive to present day trends, and nearly all enthusiastic over the special assessment, and willing to pay it promptly. E. V. McCarthy of the South Chicago Branch of the C.M.S. was introduced as the visiting officer for this meeting; told of work being done in his branch, and gave assurance that full cooperation could be had from his, as well as other C.M.S. Branch Societies along educational lines.

Most Councilors present referred to the special assessment, and that it was generally approved by the Societies. Several had appeared before various lay groups by invitation, to discuss the proposed legislative program, and especially comment on the ultimate cost, and the services generally rendered under such a plan.

HUTTON reported as chairman of the Committee on Medical History, stating that the work is advancing, although meetings have not been held on the part of the committee for several months, owing to more important considerations now before the society and profession as a whole. It is his desire, with council approval, to hold the costs down as much as possible, yet he could report satisfactory progress, and within a relatively short time there would be enough material at hand to develop another volume covering the period from 1850 to perhaps 1875. He also reported as chairman of the Committee on Medical Service and Public Relations; committee met at breakfast that same morning, and went over the agenda around the table.

STEVENSON who was unable to attend this meeting, had sent a letter relative to efforts of the optometrists to get a change in the existing law under which they practice. They want this amended to put

to an end undesired and unethical procedures now being carried on. Chicago Ophthalmological Society has endorsed the amendment, and requests the Council to give it serious consideration.

NEAL told of the legislative activities in Springfield up to this date, also commented on the Senate Bill number 5, introduced in the United States Senate by Senator Murray for himself and five other senators. Apparently an identical bill to 1320, the last introduced Wagner Murray Dingell bill. Told of the State Legislatures in Nebraska and Arkansas approving a joint resolution directed to the President and the Federal Congress showing their opposition to compulsory health insurance, and asking the legislative members from their respective states to oppose these bills if and when they are up for consideration and action. It was stated that similar joint resolutions are prepared to be introduced in other state legislatures in the near future. Neal referred to the report of the Brookings Institution, and several interesting pamphlets which have recently been made available; among these; "Uncle Sam, M.D." — "Check and Double Check". These should be in the hands of all county society officers to be used in talks before various lay groups. Referred to the optometry bill stating that if passed, it would eliminate objectionable "price advertisements", and some other irregular procedures now possible under existing laws.

MOTION; Harker-Coleman; that the Council approve the optometry bill, as presented by Neal and Hutton. Carried.

Reference had been made to the bill introduced in the state legislature which would create a special hospital for alcoholics. By proper action, the Council deferred action on this, until additional information on the subject was made available. Leary completed Hutton's committee report by telling what he has been doing in recent months as public relations consultant.

BLAIR reported as chairman of the Educational Committee, telling of the work in that office since the last meeting. Referred in much detail to the television programs now being presented over the W.G.N.-T.V. outlets. Theodore Van Dellen has been unusually interested in these programs, and largely responsible for their being given. Subjects which have been presented are "Diabetes";—"Blue Babies and Animal Experimentation";—"Birthmarks";—"What's back of your Backache";—"Is Your Pain Arthritis?"; and "The Murmur in Your Heart". Reports received by the radio station have been very complimentary, and it is hoped the programs can be continued at regular intervals. Reference to the releases from the office, speakers for lay programs, and other present activities of the committee.

BERGHOFF discussed the post graduate education program, and the talks which have been scheduled before county societies by the Scientific Service Committee. Only two of the approved 12 post graduate conferences are being arranged, or have been presented.

HOPKINS stated that the Prepayment Care Plan Committee has not held a meeting since the A.M.A.

Interim Session in St. Louis, so his report is one only of progress. He believes a meeting will be held in the near future, and some plans may be developed and presented to the Council for action at the next meeting. Report approved, by proper action. Hopkins also gave a brief report as chairman of the Advisory Committee to the Veterans' Administration, for the "home town care" plan. A letter was received from the Regional Director thanking the Society as a whole for the cooperation given in carrying out this program. This report too, Hopkins stated, is one of progress. This report likewise approved.

COLEMAN reported as chairman of the Medical Advisory Committee to the Illinois Public Aid Commission, and referred to a meeting with officials of the I.P.A.C. the previous evening. The I.P.A.C. is having trouble with their appropriation and is looking forward to the type of treatment they are to receive along this line by the present general assembly. Various proposals have been made both at the state and Federal levels, relative to possible increase in the aid to the many recipients of public aid. The most cordial relationship has existed between the committee and I.P.A.C. officials, and although this must be considered again, as a limited program, yet Coleman believes the cooperation on the part of Illinois physicians has been most commendable.

HEDGE reported as chairman of the Journal Committee; announced a slight increase in printing costs, these for labor. No other increases at this time under contemplation. Reports of Coleman-Hedge both approved.

MOTION; Lane-Coleman; that Secretary be instructed to send a congratulatory telegram immediately to Dr. Andy Hall who attained his 84th birthday a few days previously. Carried. Note; the telegram was sent that same afternoon.

ENGLISH reported as Chairman of the Committee on Rural Medical Care, telling of plans for the Conferences scheduled for Mt. Vernon on January 20, and Peoria the following day. Invitations have been sent to the officials of Farm and Home Bureaus, other farm groups, and to some of the county and township officials who have expressed a desire to be included. The programs were referred to in some detail. Also referred to some "Health Improvement Associations" being formed in a number of Illinois counties recently. They are interested in rural health problems, health education movements, but will not operate any service plans or medical care plan to provide hospital service or medical care. Believes the Society should encourage these Associations.

MOTION; English-Blair; that Council approve these plans. Carried.

PONCHER referred to the mass of material accumulated as a result of the survey of pediatric services and care, conducted by the American Academy of Pediatrics. This material should be properly and carefully edited, then he believes, should be published. The material was channeled through the Society and its Council, and Poncher believes they should supervise

the editing and eventual publication of same, perhaps in the Illinois Medical Journal.

MOTION; Hamilton-English; that the material be turned over to the Editorial Board for final preparation and publication. Motion Carried.

HOELTGEN told of the selection of committees for the local services in connection with the 1949 annual meeting. These will be published in the Journal soon. The report is one of progress, and more details will be published in the Journal.

COLE as Chairman of the Society Committee on Cancer Control, and Rogers as Executive Director, Illinois Branch, American Cancer Society, reported that the cancer exhibit to be set up at the Museum of Science and Industry, in Chicago, is progressing satisfactorily. Cole asked for Council approval for a letter they want to send to all county society officers, dealing with the educational program of the American Cancer Society, and copies of which had previously been mailed to each member of the Council. The material has been approved by Cole's committee.

MOTION; Hamilton-Neece, that the recommendations of the committee be approved, and that the Council endorse the program as presented. Motion carried.

There was a general discussion of present economic trends, and efforts being made in the present educational program as provided by the A.M.A. Releases have

been sent recently to all members of the A.M.A. and others are being prepared. It was deemed advisable in coming months, to have a committee given the authority to act in an emergency arising between meetings of the Council.

MOTION; Hawkinson-English; that the Chairman of the Council, the President, and Secretary of the Society, and Chairman of the Finance Committee be empowered to act on emergency matters between meetings of the Council. Motion carried.

Letter reported by the Secretary, from the Secretary of the A.M.A. announcing that the Society is now entitled to 10 delegates, by virtue of its increase in membership. The Council rescinded a previous action to procure a medal to be presented to the outstanding general practitioner of the year. It was discovered that the cost of a suitable die would be almost prohibitive. In its place the Secretary was instructed to procure a suitable illuminated certificate or bronze plaque. Thirteen candidates recommended by their respective component societies, were elected to Emeritus Membership, and eight to Past Service Membership.

By proper action, all bills as audited by the Finance Committee were approved and secretary instructed to see that same were promptly paid.

The Council adjourned at 12:45 P.M.

Harold M. Camp, M.D.
Secretary

AUREOMYCIN EFFECTIVE FOR NONBACTERIAL PNEUMONIA

Aureomycin, the new golden-colored antibiotic drug, is effective against pneumonia of a type which resists penicillin and sulfa drug therapy.

The cause of this disease, primary atypical non bacterial pneumonia, is not known. Only during World War II was it differentiated from similar lung infections caused by specific viruses and rickettsiae.

Writing in the January 29 issue of The Journal of the American Medical Association, Emanuel B. Schoenbach, M.D., and Morton S. Bryer, M.D., from the Department of Preventive Medicine, Johns Hopkins University School of Medicine, Baltimore, report that they gave aureomycin by mouth to 13 patients with this type of pneumonia. Twelve of these patients were severely ill.

Two of the group were clear of fever in 12 hours, and in no case did the fever last more than 72 hours after the drug was given. All 13 patients recovered from the disease.

Malaria, smallpox, tuberculosis, venereal disease, diphtheria, many others, could all be got rid of — from the whole world, without any further knowledge or research, if we had mental health and social health in the people of the world, if enough people in enough places could think in factual terms and had good mental health. Nothing keeps the diseases alive except ignorance and shortsighted self-interest. Long-sightedness would get rid of those things quickly. Brock Chisholm, M.D., Mental Hygiene, July, 1948.

Routine chest roentgenograms are now made on all patients at the time of their admission to all (Veterans Administration) hospitals and on all veterans who visit our outpatient departments for pension or compensation examinations, unless they have been examined within the previous six months. In addition to this, annual roentgenograms are to be obtained for all hospital employees and all patients who are hospitalized for more than one year. John B. Barnwell, M.D., Am. Rev. Tuberc., July, 1948.

PATHOLOGY CONFERENCES

EDWIN F. HIRSCH, DEPARTMENT EDITOR



Presentation of Three Cases

EDWIN F. HIRSCH, M.D.
St. Luke's Hospital
CHICAGO

Chronic Mitral and Aortic Stenosis (Rheumatic) of the Heart with Left Auricular Thrombosis and Embolism

A 46 year old white male entered St. Luke's Hospital on September 5, 1948 and died on September 7, 1948. According to the family, in 1930 this man was refused insurance because of a heart disease of which he was not aware. Since 1945 he had noticed shortness of breath on exertion and swelling of his feet. In July 1948, he had a pain in the right upper part of the abdomen that radiated to the back and in August he received cardiac medication for shortness of breath. On August 20, 1948 the patient had a left-sided headache which increased in severity. On September 3, he had difficulty with speech and on September 5, 1948 he was admitted to the hospital in coma.

The patient was emaciated, pale, comatose, dehydrated and incontinent. His blood pressure was 146/80 mms. Hg, his respirations were 14 and the irregular pulse rate was 80 per minute. The rectal temperature was 99°F. Dried food particles, saliva and mucus coated the membranes of the mouth. The pupils reacted to light, the left was larger than the right and funduscopic examination revealed a bilateral 2 diopter papilledema of the optic discs. The swallowing and gag reflexes were present. The neck was stiff and Kernig's sign was positive. A loud systolic murmur was in the aortic and apex regions of the heart. There was a pulse deficit and the heart was enlarged to the left and



Figure 1. Photograph illustrating the large mural thrombus of the left auricle and the chronic fibrous endocarditis and small ulceration of the mitral valve.



Figure 2. Photograph illustrating the stenosing chronic fibrous aortic endocarditis.

slightly to the right. The lungs were clear to auscultation and percussion. The abdominal and genito-urinary findings were negative. The knee, ankle and biceps reflexes were equal and active. The Babinski on the right was slightly positive and on the left negative. The Oppenheim on both sides were slightly positive. There was no spasticity of the muscles. The blood had 4,980,000 erythrocytes and 20,450 leucocytes per cmm and 13.8 grams percent of hemoglobin. Of 100 leucocytes 6 were lymphocytes, 3 were monocytes, 35 were polynuclear leucocytes, 55 were band forms and 1 was a metamyelocyte. The clear, amber acid urine contained less than 5 mgms percent of albumin. The urine cultures were sterile. The bleeding time was 2 minutes, the coagulation time 4 minutes 30 seconds and the hematocrit value was 46.0 percent. The blood non-protein nitrogen was 39 mgms percent and the CO₂ combining power of the plasma was 39 volumes percent. The light-yellow spinal fluid had a pressure of 260 mms. of water. The Pandy test was negative and there were 2-9 lymphocytes per high power fields. The electrocardiogram had a right axis deviation, an auricular fibrillation, and a depressed ST₁, ST₂, ST₃, ST₄, and a depressed T₁. The patient remained comatose. At 1 P. M. on September 7, 1948 he had a convulsion of the right side and died one hour later. The clinical diagnosis was rheumatic heart disease, auricular fibrillation and subarachnoid hemorrhage.

The essentials of the anatomic diagnosis of the necropsy are:

Marked chronic fibrous and verrucous endocarditis (rheumatic) of the aortic (aortic stenosis) and mitral valves (mitral stenosis) of the heart;

Huge mural thrombus of the lining of the left auricle and auricular appendage of the heart;

Recent hemorrhagic infarct of the left temporal lobe of the brain;

Large subdural and subarachnoid hemorrhages of the left temporal lobe of the brain;

Marked hyperemia of the leptomeninges of the brain;

Marked flattening of the convolutions and narrowing of the sulci of the brain;

Blood tinged cerebro-spinal fluid;

Foramen magnum pressure groove of the inferior surface of the cerebellum;

Recent infarcts of the spleen and kidneys;

Focal ulceration of the posterior leaflet of the mitral valve of the heart.

The heart with 3 cms. each of pulmonary artery and aorta weighed 700 gms. The pulmonary and tricuspid leaflets had slight fibrous changes. The right chambers of the heart were dilated and the muscle tissues hypertrophied. In the hugely dilated left auricle and left auricular appendage was a large mural thrombus with a friable surface 10 by 7 by 2 cms. (Figure 1) It covered the entire posterior wall of the auricle and occluded completely the auricular appendage. The mitral leaflets were fused and thickened by dense fibrous tissues so that the opening was reduced to a slit about 2 cms. wide. An ulcerated surface on the posterior cusp was

5 mms. in dia. The chordae tendineae were shortened and thickened by fibrous tissues, the papillary muscles and other portions of the myocardium were hypertrophied. The aortic leaflets, fused and thickened by fibrous tissues, were rigid, fixed in position and closely approximated so that the aortic opening was a narrow triangular slit scarcely admitting the tip of a small finger (Figure 2). The myocardium on surfaces made by cutting was tan brown tissues with focal fibrous scars. The kidneys, weighing 185 and 190 gms., had a granular cortical surface with multiple depressed scars ranging to 3 cms. maximum dia. The spleen weighed 315 gms. The capsule surface also had multiple depressed scars the largest 2 cms. in maximum dia. and several recent yellow infarcts the largest 2 cms. in dia. The liver weighed 1870 gms. and had changes of chronic passive hyperemia. The edematous, hyperemic and focally pneumonic right lung weighed 1200 gms., the left 613 gms. Reflexion of the dura from the left cerebral hemisphere disclosed a large subdural hemorrhage and on the inferior surface of the left temporal lobe was a region of necrosis 2 cms. dia. The tissues about this for 3 or 4 cms. were soft and hemorrhagic. The brain weighed 1245

gms. with blood clots and upper half of the dura. After formalin solution fixation, a more extensive examination disclosed two other hemorrhagic foci of necrosis in the cortex of the right cerebral hemisphere one 2 cms. in dia. at the level of the chiasma and the other at the level of the posterior commissure in the occipital lobe.

COMMENT

The clinical symptoms of this patient correlated with the results of the necropsy illustrate the late stages and some of the potential complications of chronic rheumatic disease of the heart. The deforming fibrous tissue thickening and fusion of the leaflets of the aortic and mitral valves with stenosis create a clinical cardiac syndrome. When this occurs with either one or both valves the potentials of thrombosis and embolism are established. This is especially true of the mitral, and thrombosis, mural or so-called "ball valve" of the left auricle is common. In this patient the mural thrombosis of the right auricle and auricular appendage was extensive, and emboli carried into various structures of the body, such as the kidneys, spleen, and brain aroused other complications of the disease, those into the brain causing death.

Ruptured Varix of the Esophagus with Laennec Cirrhosis of the Liver

A 66 year old white male entered the hospital for the fourth time on August 9, 1948 and died on October 14, 1948. His first admission to St. Luke's Hospital on October 19, 1945 was for a left cataract extraction. At that time a hard, nodular, non-tender mass was palpated in the right upper quadrant of his abdomen. He entered the hospital again on January 29, 1946 because of a chronic cough of several years' duration, ankle edema and dull discomfort in the right upper quadrant of the abdomen of two months' duration. He had a sudden severe sharp pain across the abdomen of 12 hours' duration which gradually disappeared. He was a chronic alcoholic.

At this examination his blood pressure was 188/90 mms. Hg. His heart was enlarged, he had fluid in the right chest and abdomen, his liver was palpable five inches below the costal margin, and there was marked pitting edema of the sacrum and of both lower extremities. His left eye was markedly hyperemic. The straw-colored acid urine had a specific gravity of 1.017, and had no unusual chemical constituents. The erythrocytes of the blood were 4,420,000 and the leucocytes 8,200 per cmm and the hemoglobin was 13.6 gms. percent. Leucocyte percents were: 20 lymphocytes, 1 monocyte, and 79 polynuclear of which 76 were neutrophilic and 3



Figure 3. Photograph illustrating the capsular surface of the cirrhotic liver

were eosinophilic. The erythrocyte sedimentation rate averaged 10 mm. in 15 minutes. The cephalin flocculation test was four plus, and the carbon dioxide combining power of the plasma was 46.9 volumes percent. The stools had a large amount of occult blood. The plasma prothrombin time was 71 seconds representing a clotting activity of 50.7 percent. A Roentgenogram of the chest revealed an extensive effusion of the right chest, and a barium enema disclosed no significant pathology. An electrocardiogram disclosed sinus tachycardia, low QRS in the standard leads, and a depressed T wave in leads I, II, and IV F, and these findings were interpreted as consistent with myocardial pathology. The circulation time using the fluorescein-ultra violet ray method from the right antecubital vein to the tip of the tongue was 10.2 seconds. Repeated examinations of pleural and ascitic fluid were not significant. On the 14th hospital day a piece of the liver was removed under local anesthesia. The liver was hard, irregular and nodular. The diagnosis of the biopsy tissues was cirrhosis of the liver. On the 24th hospital day the left eye was needled with resultant loss of vision. He had recurrent episodes of confusion, disorientation and aphasia, but after the intravenous administration of 4 units of dried plasma his general condition improved. There was no evidence of pleural effusion and only a slight pitting edema of the feet. He continued to be confused and dis-

oriented up to his discharge on April 19, 1946. He entered the hospital for the third time on July 22, 1948 and stayed for 20 days. A year previously a cataract of his right eye had been removed. On the 15th hospital day a right thoracentesis yielded 2500 cc. of a clear straw-colored fluid. Laboratory tests revealed marked liver damage. The total plasma proteins of the blood was 6.77 gms. percent of which 1.79 gms. were albumin and 4.98 gms. were globulin. He was discharged on the 20th hospital day, only to enter the hospital for the fourth and last time eight days later on August 19, 1948 because of ascites, right hydrothorax and edema of the ankles and sacrum. Multiple thoracenteses of the right chest yielded large quantities of a dark-amber cloudy fluid and air was injected with resultant right hydropneumothorax and subcutaneous emphysema of the right side of the chest. On the 8th hospital day a ulna section of his left ankle was done and serum albumin was administered almost daily for two weeks, a total of 450 grams by September 7, 1948. The serum albumin was elevated from 1.92 gms. percent to 4.65 gms. He became jaundiced, slept most of the time and responded poorly to stimuli. Subsequently he had emesis of blood, black stools and passed a port wine colored urine. He received penicillin and streptomycin because of positive B. Coli blood cultures. His condition grew progressively worse and he died on October

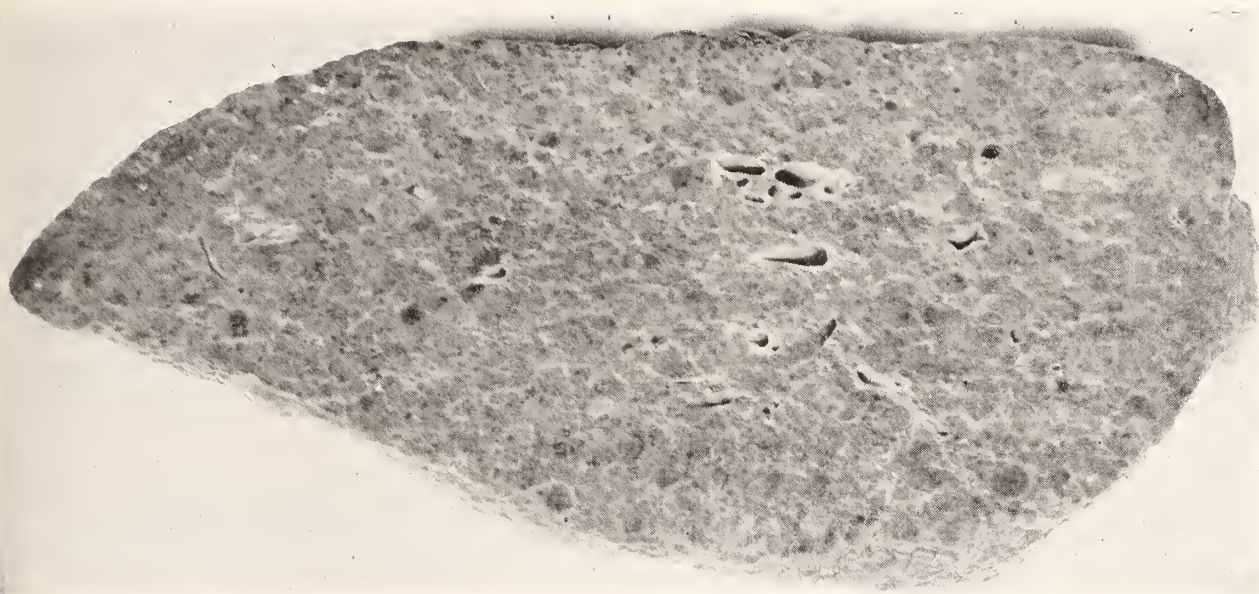


Figure 4. Photograph illustrating a surface made by cutting the cirrhotic liver.

14, 1948. The clinical diagnosis was Laennec's cirrhosis of the liver, arteriosclerotic and hypertensive heart disease.

The essentials of the anatomic diagnosis of the necropsy are:

Marked cirrhosis (Laennec's) of the liver;
Recent ruptured varix of the esophagus;

Blood stained fluids of the mouth, the lumen of the stomach, small bowel, esophagus, trachea and bronchi;

Marked generalized icterus;

Marked generalized anasarca;

Marked ascites, hydrothorax, hydropericardium, and pitting edema of the sacrum, ankles and feet;

Marked dilatation of the esophageal and left suprarenal veins.

The body of this white male weighing 185 pounds had a slight edema of the ankles and feet. The abdomen contained 6200 cc. of a turbid brown fluid, the pleural spaces had 500 cc. of a clear yellow fluid. The lining of the esophagus was markedly hyperemic and the submucosal veins, especially at the cardiac end of the esophagus were dilated and some of them

thrombosed. The lumen of the stomach and of the entire bowel contained quantities of brown to black blood material. The hard, contracted nodular grey yellow liver weighed 1105 gms. (Figure 3) Surfaces made by cutting (Figure 4) had tan grey and yellow nodules ranging from 0.4 to 0.8 cm. dia. and tough intervening fibrous tissues. Microscopic examination of the liver tissues demonstrated cirrhosis and fatty changes. The spleen weighed 1105 gms. and consisted of soft dark red tissues with a filigree of trabecular tissues. The right kidney weighed 210 gms., the left 190 gms.; the edematous right lung weighed 440 gms., the left 575 gms. The lungs histologically had foci of bronchopneumonia.

COMMENT

Death from internal hemorrhage secondary to a ruptured varix of the esophagus or stomach is a common complication with cirrhosis of the liver. Measures for the prevention or control of these hemorrhages have not been devised, and obviously are difficult because of the approach to these vessels and to find the source of the hemorrhage.

(Continued on page 186)

Acute Coronary Thrombosis of the Heart

A 70 year old Negro entered St. Luke's Hospital for the second time on September 21, 1948 and died on September 22, 1948. He was discharged from the hospital on July 8, 1948 after a stay of 17 days during which he had a transurethral resection of the prostate. He made an uneventful recovery and had been followed in the out-patient clinic. Eight days before his second admission he had indigestion and nausea for a few hours. He also had severe pain in his chest and left shoulder and perspired freely. His extremities were cold and clammy, he vomited several times and, in addition, had shortness of breath, orthopnea and one attack of paroxysmal nocturnal dyspnea. The pain gradually subsided but he continued to be short of breath and was orthopneic. Two days later his ankles began to swell. He became thirsty, drank much water, had little appetite but craved salt. His scanty urine was bloody. One day prior to admission he consulted a physician who prescribed digitalis. Because he seemed to be getting worse he returned to the hospital.

Since 1929 this patient had been followed in the out-patient clinic. There the diagnosis centered around syphilis, urethral strictures due to gonorrhea, diverticulums of the colon and osteoarthritis. In 1930 an internal urethrotomy was performed for the strictures. In 1939 and 1940 he received six bismuth injections and the blood tests for syphilis were strongly positive. He was then transferred to the Municipal Social Hygiene Clinic for further treatment.

He gave no history of heart trouble when he was first admitted to St. Luke's Hospital and his blood pressure then was 180/120 mms. Hg. When finally admitted he had respiratory distress, his blood pressure was 160/100 mms. Hg., his pulse was 130 and his respirations were 44 per minute. The temperature was 99.6°F. Both lungs had many rales and there was dullness over the right base. The apex of the heart was in the sixth interspace, 1 cm. to the left of the mid-clavicular line. The heart rhythm was fast, but regular. The heart sounds were loud at the apex and the aortic second sound was accentuated. No murmurs were heard because of the

loud rales in the lungs. The abdomen was distended, the liver was tender and the lower edge was 2 to 3 cms. below the costal arch. The legs were edematous to the knees. Neurological examination was essentially negative. No laboratory tests were made during the patient's second admission. During his first admission nothing abnormal was noted in the laboratory examinations except a moderate anemia of the blood. A blood Kahn test at that time was negative. Five hours after admission the patient had severe dyspnea, was placed in an oxygen tent and given aminophylline suppository. Before that, he had received 0.4 mgms of digitoxin. Six and one half hours after admission he seemed more comfortable but was dyspnoeic. Ten hours after admission he suddenly expired. The clinical diagnosis was arteriosclerotic heart disease with severe congestive failure, syphilitic heart disease, recent myocardial infarction, prostatic hemorrhage and tertiary syphilis.

The essentials of the anatomic diagnosis of the necropsy are:

- Recent obturator thrombosis of the anterior descending branch of the left coronary artery of the heart;
- Huge recent infarct of the myocardium of the left ventricle and septum of the heart;
- Marked acute fibrinous pericarditis;
- Large mural thrombus of the left ventricle of the heart;
- Marked hypertrophy and fatty changes of the myocardium of the heart;
- Chronic syphilitic aortitis;
- Saccular aneurysm of the ascending portion of the aorta;
- Bilateral hydrothorax;
- Anasarca.

Both legs of the body were moderately edematous and the pleurae had about 500 cc of clear fluid. The lining of the aorta had considerable atherosclerosis and also in the arch and thoracic portions, syphilitic scars. The ascending portion of the arch was diffusely dilated. The pericardial sac contained a turbid fluid. The lining of the



Figure 5. Photograph illustrating the syphilitic aortitis, the thrombosis of the anterior branch of the left coronary artery, and the infarction and mural thrombosis of the myocardium of the left ventricle of the heart.

sac and the epicardium were roughened by a large amount of fibrin. The heart weighed 600 gms. The tricuspid and pulmonic valves, the right auricle and ventricle had no significant changes. The lining of the left ventricle anteriorly beginning at the apex and extending up 6.5 cms. had a grey mural thrombus and the

myocardium beneath was soft (Figure 5). Surfaces made by cutting demonstrated an extensive recent infarct of the anterior portion of the left ventricle and also of the septum reaching up 9 cms. from the apex. Two and one-half cms. from the ostium of the left coronary artery, the anterior descending branch had an antero-matous and obturator thrombosis occlusion of the lumen that extended 2.5 cms. The lining of the coronary arteries otherwise had moderate fibrous and fatty changes. The liver, kidneys, spleen and lungs had only the changes of passive hyperemia and those associated with aging of the tissues.

COMMENT

The clinical history of this patient initially deals with the treatment of chronic syphilis. Apparently the therapy for this was successful in maintaining reasonably-good health. The later clinical episode concerns a coronary thrombosis with myocardial infarction on the basis of atherosclerosis. The symptoms are typical and the cardiac conditions disclosed by the necropsy are those of death within a few days after the occlusion.

PREVENTIVE MEDICINE

We keep saying with monotonous regularity that it is easier to treat early diabetes than the later stages of the disease, easier to keep in good shape the heart of the patient examined before decompensation has set in; easier to save life when the carcinoma is detected before metastasis has occurred; easier to heal a small and new gastric ulcer than an old and deep one.

These are fine sentiments, but will the doctor really give an adequate office study to the patient who has no complaints—only a desire for a “thorough checkup”? It can be done. It needs patience, and interest, and professional competence, and above all, that special kind of imagination which sees the limitless possibilities of preventive medicine in the doctor's office.—J. Med. Soc. of N. J.

The appearance of tubercle bacilli in sputum, gastric contents or other body fluids is an extremely significant episode in the course of tuberculous infection. Hence a thorough and systematic search for tubercle bacilli must be instituted in all cases where the presence of tuberculosis is suspected or where tuberculosis must be considered a possibility in differential diagnosis. Francis J. Weber, M.D., Pub. Health Rep., Sept. 3, 1948.

Health education is recognized as an essential tool in tuberculosis control. The general public must know the seriousness of the disease and its cost in human misery and money before it will accept its responsibility to support the work financially. Report, Expert Committee on Tuberculosis, Office International de Hygiene Publique, Paris, Pub. Health Rep., May 7, 1948.

NEWS OF THE STATE



CHAMPAIGN

Society Election.—At a meeting of the Champaign County Medical Society, December 9, Dr. J. C. Dalenbach, Champaign, was chosen president succeeding Dr. W. H. Schowengerdt. Other new officers of the society are Dr. C. H. Drenckhahn, vice president and president elect; Dr. J. J. Westra, secretary-treasurer; Doctors T. G. Knappenberger and Schowengerdt, delegates to the Illinois State Medical Society; Doctors Fred Ricketts and W. H. Cooper, alternates to the Illinois State Medical Society; Dr. G. R. Ingram, representative for medical defense and Doctors J. B. Christie and Marion Ricketts, three-year terms on the executive committee.

Champaign Secretary Active in Opposing Socialized Medicine.—Dr. J. J. Westra, secretary of the Champaign County Medical Society, has made several appearances before club groups in Champaign and vicinity recently. Some of the groups are Lions Club of Champaign-Urbana, Champaign Exchange Club, Presbyterian Men's Club, Junior Chamber of Commerce and the Rotary Club. The title of Dr. Westra's talk is "National Compulsory Health Insurance versus American Liberty."

CHRISTIAN

Society Chooses New Officers.—At its annual meeting, January 11, the Christian County Medical Society elected the following officers: Dr. W. A. Monaghan, Taylorville, president; Dr. R. M. Seaton, Morrisonville, vice president; Dr. W. S. Miller, Assumption, secretary-treasurer; Dr. N. C. Huss, Assumption, assistant secretary-treasurer; Dr. T. A. Lawler, Taylorville, delegate to the Illinois State Medical Society; Dr. L. C. Young, Taylorville, alternate delegate.

COOK

New Betatron.—A 22-million volt betatron, science's newest source of high-energy x-rays and electrons, now is being installed at the University of Illinois College of Medicine on Chicago's West Side for use in cancer treatment and research.

The University of Illinois will pioneer in the medical use of this instrument. It was invented in 1940 by Prof. Donald W. Kerst of the University's physics department at Urbana.

Use of the betatron for medical research was delayed during the war while attention was focused on industrial x-ray work. The University's College of Medicine is the first to receive this instrument for medical use.

X-rays now used in hospitals for treating deep cancers are of 200,000 to 2-million volts energy. The 22-million volt betatron may in the future become standard for deep treatment after the way has been paved by the University.

Grants at Illinois.—Five research grants in the amount of \$14,346 have been awarded to the University of Illinois College of Medicine.

Eli Lilly and Company of Indianapolis, Ind., has awarded a \$5,346 grant for studies on mumps vaccination by the departments of bacteriology and pediatrics, under the supervision of Dr. J. E. Kempf and Dr. Ralph Spaeth.

LaRabida Jackson Park Sanitarium has contributed \$3,500 for the study of rheumatic fever. Dr. G. A. Bennett and Dr. H. G. Poncher will serve as project supervisors for the study which will be undertaken by the departments of pathology, pediatrics, and medicine.

The G. D. Searle Company of Chicago has awarded a research grant of \$3,000 to Dr. Max

Santer of the department of medicine for clinical investigation of bronchial asthma. Dr. John R. Necheles and Dr. Alexander Wolf will participate in the study, an evaluation of anti-asthmatic drugs.

Smith, Kline and French of Philadelphia, Pa., has awarded a \$2,000 grant for the study of the effect of amines in experimental renal and other hypertension. The study is being undertaken by E. A. Ohler in the department of physiology.

A research grant in the amount of \$500 has been received from the Commonwealth Fund for the study of nucleic acids in cells. The study will be conducted under the supervision of J. R. G. Bradfield in the department of pathology.

Branch Meeting.—The North Shore Branch of the Chicago Medical Society held a meeting at the Edgewater Beach Hotel, February 1. The following speakers were on the program: Dr. Francis L. Lederer and Dr. George Shambaugh on "The Physician's Responsibility to the Deaf and Hard of Hearing" with special reference to hearing aids and the fenestration operation and Dr. Mathew Steimer and I. P. Bronstein on "Recent Advances in Problems of the Young."

Personal.—John L. Keeley, Chicago, two days before the meeting, accepted an invitation to address the Bay County Medical Society in Bay City, Mich., February 9. The appointment had been scheduled by Dr. Philip Thorek who was seriously ill. Dr. Keeley did a double service—he did not disappoint a county medical society group and assisted a brother physician. The title of his talk before the Michigan group was "Intestinal Obstruction."

Woman Physician Honored.—A tea in honor of Dr. Helen V. McLean, Chicago, was held at the Edgewater Beach Hotel recently to mark her receiving a special Elizabeth Blackwell Citation at Hobart and William Smith Colleges, Geneva, N. Y., for work in psychiatry, especially at the Chicago Institute for Psychoanalysis. The tea was sponsored by the Medical Woman's Library Committee of the American Medical Woman's Association and the Chicago chapter. Mrs. Eileen Cunningham, past president of the American Medical Library Association, spoke. Funds raised at the tea will go toward establishing a memorial library at the Woman's Medical College in Philadelphia.

New Director of Psychiatry.—Dr. Edward J. Kelleher has been named director of the Municipal Court Psychiatric Institute, succeeding the late Dr. David B. Rotman. Dr. Kelleher, who has been acting director, served as assistant to Dr. Rotman from 1941 to 1943.

Clayton Loosli Given New Appointment.—Dr. Clayton G. Loosli, associate professor of medicine and director of the student health service of the University of Chicago, recently was appointed head of the division of preventive medicine and public health in the school of medicine. Dr. Loosli will be in charge of projects dealing with preventive medicine in both industrial and general public health

areas. An authority on respiratory diseases and their control, he also will direct the influenza detection service established recently at the university by the U. S. Public Health Service. Dr. William G. Beadenkopf, assistant professor of medicine, has been named director of the student health service.

New Radiation Physicist.—Dr. John S. Laughlin has been appointed assistant professor of radiology and radiation physicist at the University of Illinois College of Medicine.

Dr. Laughlin is working on the betatron project on the campus of the University of Illinois' Chicago Professional Colleges.

A 22-million volt betatron was delivered to the University on January 12, and is now being assembled and installed. The College of Medicine was the first to receive the instrument for cancer treatment and research.

Dr. Laughlin, a graduate of Willamette University, Haverford College, and the University of Illinois, was associated with the cyclotron and betatron projects at the Urbana campus of the University. He has conducted research on radioactive isotopes.

Dr. Roger A. Harvey, head of the department of radiology and director of the betatron project for the College of Medicine, also announced that Fingel Sponberg would serve as instrument maker in the betatron shop. He has been employed in the physics betatron research shops on the Urbana campus of the University.

Special Society Election.—Dr. Carl W. Laymon, Minneapolis, was elected president of the Chicago Dermatological Society at its meeting, January 19; Dr. Irene Neuhauser, Chicago, vice president, and Dr. James R. Webster, Chicago, secretary-treasurer.

Fund for Students.—Establishment of the Patrick and Bertha Mooney Memorial Fund for the assistance of worthy students attending the University of Illinois College of Medicine has been announced by Dean John B. Youmans.

The fund has been established by Dr. F. P. Mooney of Philo, Ill., a graduate of the University of Illinois, as a memorial to his parents.

The fund is to be used under the direction of Dean Youmans for the assistance of any needy and deserving student.

CRAWFORD

Personal.—Dr. J. M. Mitchell, Oblong, was given a dinner and reception by the Oblong City Lodge 644 A.F. & A.M. in honor of his completion of fifty years in the Masonic fraternity. He was presented with the fifty year emblem. Dr. Mitchell is ninety-four years of age.

DU PAGE

Hospital News.—Dr. J. Ruskin Hawkins was named president of the medical staff of DuPage Memorial Hospital, December 28. Dr. Harry Hart was chosen vice president and Dr. Edward Brickman, secretary-treasurer.

EFFINGHAM

Personal.—Mr. John L. Bach, director of press relations, A.M.A., discussed "Fifty Years of Medicine" before the Effingham Kiwanis Club, February 10.

JEFFERSON-HAMILTON

Public Meeting Honors Physician.—More than a thousands persons gathered at the home of Dr. D. F. Whited in Dahlgren, January 8, to pay a double tribute — the completion of fifty years in the practice of medicine and his seventy-sixth birthday. Twenty-one hundred contributors from 950 families donated more than \$2,800 for "Dr. Whited Day". The physician was presented with a new 1949 Ford business coupe, a gold watch inscribed "presented to Dr. Whited on his 76th Birthday by his Friends." Mrs. Whited received an orchid, a complete living room suite including a table lamp and a table. Dr. Andy Hall, Mount Vernon, made the presentation speech. According to the Mcleansboro Times Ledger, Dr. Whited "had fulfilled every tradition of the country doctor; never refused a call; night nor bad weather never stopped him, and he eased the pain of those who paid with the same care as those he knew couldn't pay him."

Andy Hall Observes Eighty-Fourth Birthday.—Dr. Andy Hall, Mount Vernon, was guest of honor at a surprise dinner on his eighty-fourth birthday at the Hotel Emmerson, January 8, a few hours after he had presided at a similar celebration in honor of Dr. D. F. Whited, Dahlgren.

New Officers.—Dr. A. C. Tobey, Mcleansboro, was elected president of the Jefferson-Hamilton County Medical Society at a meeting in his office, December 30. Other officers chosen are Drs. Roy Highsmith, vice president; Harry Thompson, secretary-treasurer; — Andy Hall, delegate, and J. E. Dixon, alternate. Dr. D. F. Whited, Dahlgren, was presented with the insignia and certificate indicating his membership in the Fifty Year Club of the Illinois State Medical Society, Dr. Hall making the presentation. Dr. Robert Bartlett, St. Louis, addressed the meeting on "Surgery of the Colon."

KNOX

Dr. William H. Maley who has practiced fifty-two years in Galesburg, recently retired from active practice. Dr. Maley graduated at Rush Medical College in 1897 and located soon after in Galesburg.

MACON

Society Election.—Dr. Hyman J. Burstein was chosen president elect of the Macon County Medical Society and Dr. Vernon M. Long was inducted into the presidency at a recent meeting. Other officers are Drs. Maurice D. Murfin, reelected secretary; Chester T. Johnson, treasurer; Arthur F. Goodyear, delegate to the Illinois State Medical Society; Dr. Murfin, alternate to the State Society and R. Zink Sanders, representative to the medical dental service bureau.

Hospital News.—Dr. F. Jack Brown has been named president of the Decatur and Macon County Hospital staff, succeeding Dr. F. G. Irwin. Dr. Dwight A. Pence was elected vice president and Dr. Herbert J. Bavor was named secretary-treasurer.

Start Evening Tumor Clinic.—The Cancer Diagnostic Clinic began its evening sessions combined with a clinical-pathological conference at St. Mary's Hospital on Thursday, January 20, 1949. In announcing the new program, Dr. Arthur L. Ennis, chairman of the cancer program and representative of the Macon County Chapter of the American Cancer Society, said that he hoped to encourage attendance of the cancer clinic sessions both for the advantage of patients referred for study and as part of the educational plan in cancer for Macon County doctors.

The meetings will be held monthly alternately at St. Mary's and Decatur and Macon County Hospitals. The program for the general clinical-pathological conference will be directed by the pathologists at each hospital, Dr. W. A. Hause and Dr. George Y. McClure, respectively. Beginning in February the time of the meeting will be 7:30 p.m. on the first Tuesday evening of each month.

In addition to the radiologists, Drs. John E. Madden and Willard C. Smullen, other members are assigned to represent the various specialties during given periods, as follows:

Surgery

Drs. Rich and Murfin	Jan. to May
Drs. Hoffmann and Mulrooney	May to Sept.
Dr. D. A. Pence	Sept. to Jan.

Urology

Drs. Simon and Neece	Jan. to July
Dr. Rufus J. Snyder	July to Jan.

Ear, Nose and Throat

Drs. McClelland and Hubble	Jan. to May
Dr. Thomas P. Leonard	May to Sept.
Dr. Louis Slatin	Sept. to Jan.

Orthopedics

Dr. William L. Wallace	Jan. to July
Dr. Sterling G. Parker	July to Jan.

Pediatrics

Dr. Scott J. Wilkinson	Jan. to July
Dr. Lee O. Frech	July to Jan.

Medicine

Dr. F. Jack Brown	Jan. to May
Dr. Ferris D. Highsmith	May to Sept.
Dr. Charles L. York	Sept. to Jan.

Dr. Hyman J. Burstein will represent dermatology and Dr. John S. Kapernick, neurology.

MADISON

Society News.—"Laboratory Tests in Liver Disease" was discussed by Dr. Walter Siebert, St. Louis, before the Madison County Medical Society at St. John's Methodist Church in Edwardsville, January 6. — Dr. Leonard T. Furlow, St. Louis, addressed the society in December on "Intracranial Space Occupying Lesions" with illustrations.

Regional Heart Meeting.—The Illinois Heart Association, in cooperation with the Madison County Medical Society, held a heart symposium at the Mineral Springs Hotel in Alton, February 3. Participants included the following: Dr. Robert Elliott, Alton, Use of Quinidine in Auricular Fibrillation; Dr. Walter M. Whitaker, Quincy, The Rheumatic Heart in Children; Dr. John J. Hammond, St. Louis, The Heart Patient as a Surgical Risk; Drew W. Luten, St. Louis, Use of Digitalis and Associated Derivatives. At the evening session, Dr. Howard A. Lindberg, Chicago, spoke on "Certain Concepts Concerning the Medical and Surgical Treatment of Hypertension."

MARION

Personal.—Dr. G. N. Welch has been appointed health officer of Centralia by Mayor Blanchard to succeed the late Dr. R. H. Brown. This is the second time that Dr. Welch has held the position, having served from 1927 to 1931.

MC DONOUGH

Personal.—Dr. Don S. McClellan has resigned as college physician at Western Illinois State College in order to take over the practice of the late Dr. Frank Dillon, Colchester.

MC LEAN

Hospital News.—Dr. Tom Scott was elected president of the St. Joseph's Hospital medical staff recently. Other officers are Drs. O. L. Abbott, vice president and John T. France, secretary-treasurer.

PEORIA

Psychiatric Conference.—A postgraduate conference for physicians was held at the Peoria State Hospital, Peoria, February 16. Included among the speakers were Dr. Harold H. Dubner, Chicago, "Experiences with Combined Electro-Shock and Insulin Therapy"; Dr. Samuel Liebman, Winnetka, "The Problem of Geriatric Psychiatry"; Dr. F. Garm Norbury, Jacksonville, "Techniques in Neuropsychiatric Examinations"; Dr. Benjamin Boshes, Chicago, "The Medical Management of Epilepsy"; Dr. Groves Smith, Godfrey, "The Problems of the Sexual Psychopath in Relation to Criminal Procedures and Community Adjustment"; Dr. V. G. Urse, Chicago, "Psychotherapy"; Dr. Walter H. Baer, Peoria, "Emergency Commitments" and Dr. Eric Oldberg, Chicago, "Management and Sequelae of Acute Head Injury." The program was presented under the auspices of the Illinois Department of Public Welfare, Illinois Department of Public Health, Peoria County Medical Society and National Mental Health Act under the direction of Dr. Ben W. Lichenstein, Chicago, and Dr. Richard J. Graff, superintendent of Peoria State Hospital.

RANDOLPH

Society News.—At a recent meeting of the Six County Medical Society, including the counties of Perry, Jackson, Union, Williamson, Franklin and Randolph, at the Belvidere Club, two miles west of Steeleville, Dr. Harold K. Roberts, St. Louis, ad-



Illinois probably has many flying Doctors but David B. Freeman of Moline is the only one who piloted his own plane to the 4th District Post-Graduate Meeting at Monmouth on October 28th, 1948. Dr. Freeman is the Chairman on Surgery for our Annual Meeting.

ressed the group on "Present Day Management of Diabetes."

ROCK ISLAND

Society News.—Dr. Franklin Peck, director of research laboratory, Eli Lilly Company, Indianapolis, discussed "Newer Concepts in Management of Diabetes" before the Rock Island County Medical Society in Rock Island, February 8.

Retires After Thirty-One Years of Service.—Dr. Charles E. Mayos, seventy-two, assistant superintendent of the East Moline State Hospital and a member of its medical and psychiatry staff for thirty-one years, retired January 1. Dr. Mayos joined the East Moline State Hospital in 1917 following his internship at Peoria State Hospital. He was senior physician at the local hospital until 1930 when he was named assistant superintendent. He served as a captain in the medical corps during World War I.

District Meeting.—Dr. R. V. Daut, Davenport, Iowa, discussed "Cancer of the Prostate: Aids in Diagnosis, and Advances in Treatment" before the quarterly meeting of the Iowa and Illinois Central District Medical Association in the Fort Armstrong Hotel, Rock Island, March 16. Dr. Clarence Dennis, professor of surgery at the University of Minnesota School of Medicine, Minneapolis, was the guest speaker, covering "Surgical Treatment of Ulcerative Colitis."

Society News.—Dr. Willis J. Potts, surgeon and chief, Children's Memorial Hospital, Chicago, addressed the Rock Island County Medical Society on

"Surgical Treatment of Congenital Heart Lesions," recently.

ST. CLAIR

Society Election.—Dr. J. E. Wheeler, Belleville, was chosen president-elect of the St. Clair County Medical Society and Dr. Herman J. Nebel was installed as president. Other officers are Dr. Francis E. Bihss, East St. Louis, vice president; Dr. Owen J. Eisele and Dr. Harold McCann, both of Belleville, were reelected secretary and treasurer respectively.

SALINE

New Officers.—Dr. A. J. Butner was elected president of the Saline County Medical Society recently. Dr. Robert J. Ferrell was named vice president and Dr. C. J. Hauptmann, secretary-treasurer.

SANGAMON

Hospital News.—Dr. Rex Campbell has been elected president of the Memorial Hospital, Springfield, succeeding Dr. T. D. Masters. Other officers are Drs. H. S. Dickerman, vice president and Richard Allyn, secretary. Drs. F. N. Davis and R. F. Herndon were reelected to the executive committee. A new member elected to the committee is Dr. R. J. Patton.

Society News.—Dr. Julius Jenson, St. Louis, addressed the Sangamon County Medical Society, January 6, on "Differential Diagnosis of Pain in the Chest."

New Officers.—The new officers of the Sangamon County Medical Society are Drs. O. E. Ehrhardt, president; D. J. Lewis, vice president; Wm. DeHollander, secretary treasurer; D. H. Trumpe and J. E. Reisch, delegates to the Illinois State Medical Society and H. L. Penning and M. J. Salzman, alternate delegates.

Society News.—"Use and Abuse of Sex Hormone Therapy" was the subject of Dr. D. L. Sexton, assistant professor of internal medicine, St. Louis University School of Medicine, before the Sangamon County Medical Society in Springfield, February 1.

TAZEWELL

New Officers.—Dr. Harold Feldman was elected president of the Tazewell County Medical Society at a recent meeting at the Pekin Country Club. Dr. J. Flickinger, Hopedale, was named vice president and Dr. W. Calhoun, Tremont, was reelected secretary-treasurer. It was decided at this meeting that the two successful functions of 1948 would be established as yearly events. They were the annual doctors and wives dinner and the Postgraduate Conference that was held in Pekin, December 9.

WILLIAMSON

Brother Physicians Close Office.—A professional partnership that lasted more than forty years ended recently when Doctors William T. and Frank Johnson, brothers of Eldorado, closed the office they had shared for over four decades. Dr. William Johnson, 81, has gone to St. Petersburg, Fla., for a vacation. He has practiced for 54 years and may open another office when he returns from the south.

Dr. Frank Johnson, 77, has retired because of ill health. He will make his home with a son-in-law and daughter, Dr. and Mrs. E. M. Travelstead, near Harrisburg. He also plans to raise blue-ribbon livestock as a hobby.

WILL-GRUNDY

Heart Symposium.—The Illinois Heart Association, in cooperation with the Will-Grundy County Medical Society, sponsored a symposium on the heart at the Hotel Louis Joliet, January 26. Speakers included Dr. Chester Kurtz, Madison, Wis., on Rheumatic Heart Disease; Dr. William E. Anspach, Joliet, X-Ray Diagnosis in Heart Disease; Willis J. Potts, Chicago, Surgery of Congenital Heart Disease. Dr. Geza De Takats, Chicago, gave the principal address in the evening on "Surgical Treatment of Hypertension."

WINNEBAGO

Hospital News.—Dr. C. H. Boswell, president of the medical staff at Rockford Memorial Hospital, announced that an eight-channel electroencephalographic machine manufactured by the Grass Instrument Company has been installed at Rockford Memorial Hospital. Mrs. Lois Clift, assistant director of nurses at the Hospital, is supervisor of the new diagnostic service and should be contacted directly by physicians. Mrs. Clift studied under Dr. Frederic A. Gibbs and at the Illinois Neuropsychiatric Institute, Chicago.

HEALTH DEPARTMENT ACTIVITIES

Dental Health Day.—"February 7 and every day should be children's dental health day," declared Dr. Roland R. Cross, state director of public health, in calling attention to the first National Children's Dental Health Day, which was observed generally in Illinois, February 7.

This observance was sponsored by the American Dental Association and its state and local affiliates throughout the Nation to focus attention on the need for better dental health for children.

"Almost every adult is aware that adequate dental care in childhood would have spared much expense, discomfort and ill health in later life," Dr. Cross said. He pointed out that about nine out of every 10 children in this country today are subject to dental disease, especially tooth decay. Furthermore, dental authorities report that cavities are appearing in children's teeth about six times as fast as they are being filled.

"While these facts point up the need for dental care, they also serve as a reminder of the harmful effects dental neglect may have on the physical health and general welfare of children," Dr. Cross said.

"Although there is no sure way to prevent tooth decay, the dental profession, after years of study, has developed a program by which the ravages of

dental disease can be controlled to a large extent. Since deficient dental conditions usually have their inception in children and youth, they can best be controlled by providing proper dental care in the early years of life."

Dr. Cross urged parents, teachers and other community leaders of Illinois to join in the observance of National Children's Dental Health Day and to cooperate with the dental profession in the development and maintenance of year-round dental programs for the benefit of all children.

New Diagnostic Clinic.—As a part of Illinois' expanding cancer program, the 20th state-aided cancer diagnostic clinic began operation at the Evanston hospital, Evanston, on January 1, Dr. Roland R. Cross, state director of public health, announced today.

This diagnostic clinic is under the direction of a cancer committee appointed by the medical staff of the Evanston hospital. The chairman of the committee is Dr. James P. Grier. Clinic sessions are scheduled for every Thursday at 11 a.m.

The nineteen other cancer diagnostic clinics sponsored by the state department of public health are located at Bloomington, Canton, Champaign, Chicago, Danville, DuQuoin, East St. Louis, Elgin, St. Francis hospital at Evanston, Ever Green Park, Herrin, Jacksonville, Ottawa, Peoria, Quincy, Rockford, Savanna, Springfield and Waukegan.

"These clinics offer free consultation service to any Illinois physician in the diagnosis and treatment of cancer patients," Dr. Cross said. "Any person who has symptoms suggestive of cancer may arrange through his family physician for admission to any one of these clinics."

Dr. Cross cited a report showing that 3,809 residents of Illinois entered these clinics for examination during 1948. The report also shows that 11,568 follow-up examinations were made.

In addition to giving free examination service to patients referred by physicians, each of these clinics maintains a free tissue diagnostic service for patients who cannot afford the cost of this procedure. A total of 2,937 tissue examinations were made by these clinics during last year, Dr. Cross said.

Chicago's Health.—1948 was one of Chicago's healthiest years. Provisional health statistics show that deaths from communicable diseases were held to new record lows, the infant death rate was the second lowest in Chicago's history, and a new all-time low maternal death rate was achieved.

Over 77,000 births were registered in Chicago last year, a total surpassed only by 1947's record of 82,735. Some 38,000 deaths were reported for the year, with a rate of 10.3 per 1,000 population — under the 39,161 deaths and rate of 10.7 in 1947.

Maternal and Infant Welfare.—The lowest maternal death rate in Chicago's history — 0.6 per 1,000 live births, compared with 1.0 in 1947. An infant death rate of 28.1 less than the 1947 rate of 28.2 and below any previous year except 1941, when the rate was 27.8.

Communicable Diseases.—One death from diphtheria — under the previous record of 3 in 1947. Scarlet fever deaths held to 0 for the third straight year. Whooping cough deaths at a new low — four in 1948 and six in 1947. Typhoid fever held to one death, as against two in 1947. The tuberculosis death rate down from 38.2 to 35.7 per 100,000. Ten resident deaths and 313 cases of polio for the year, with 11 deaths and 410 cases in 1947.

Leading Causes of Death.—Heart disease high with 14,826, under the 15,587 in 1947. Cancer second with 5,983 deaths — down from 6,219 in 1947. Other leading causes: intracranial lesions, 2,454; all accidents, 2,043; nephritis, 2,014; tuberculosis, 1,311; diabetes, 1,245; pneumonia, 1,182; premature births, 849; cirrhosis of the liver, 602. The death rate for each of these causes, with the exception of premature births and accidents, down from 1947.

V.D.—New cases of early infectious syphilis down from 290 to 200 a month. Total syphilis cases averaged 900 a month, down from 1,100 in 1947. Gonorrhea held to 2,200 cases a month for both 1947 and 1948.

Food Inspection.—17,000 restaurants and taverns inspected at least twice. An estimated total of 80,000 food inspections were made. Over 4,000,000 pounds of unfit food were condemned. 175 food establishments were closed for violations.

Grade A Milk.—21,000 dairy farms in four states were under inspection in 1948. An estimated 53,000 inspections were made of all steps in milk production. 840,000 pounds of substandard milk were condemned.

Laboratories.—Over 750,000 samples and specimens were examined in 12 months. The majority (400,000) were for venereal disease control. 50,000 samples of food, milk, and water were tested. Some 300,000 specimens were examined in the diagnosis and control of communicable diseases.

DEATHS

ALBYN L. ADAMS, Jacksonville, who graduated at Bennett College of Eclectic Medicine and Surgery in Chicago in 1886, and Columbia University College of Physicians and Surgeons in 1889, died January 31, aged 83. He had practiced as an ophthalmologist in Jacksonville for many years and was oculist and aurist at the Illinois School For The Blind since 1892. He was a member of the "Fifty Year" Club of the Illinois State Medical Society.

LOUIS BOTHMAN, Chicago, who graduated at Rush Medical College in 1917, died of a heart attack, January 19, aged 55. He was clinical professor of ophthalmology at the University of Illinois College of Medicine.

RUDOLPH H. BROWN, Centralia, who graduated at St. Louis College of Physicians and Surgeons, St. Louis, in 1902, died January 10, aged 69. He had been health officer for Centralia since 1943.

SAMUEL COLLINS BUCHAN, Chicago, who graduated at Bellevue Hospital Medical College, New York, in 1877, died November 27, aged 97, of cerebral hemorrhage.

EVERETT MONROE COOLEY, retired, Lawrenceville, who graduated at Kentucky School of Medicine, Louisville, in 1892, died January 6, aged 80.

FREDERICK EDWARD CUNNINGHAM, Chicago, who graduated at Loyola University School of Medicine in 1912, died January 20, in New Orleans while on a vacation. He was 63 years of age.

PERCY J. DELANO, Oak Park, who graduated at the University of Illinois College of Medicine, Chicago, in 1926, died January 13, aged 50. He was on the staff of West Suburban Hospital, Oak Park.

HENRY WYLEY GILES, Aledo, who graduated at Keokuk (Ia.) Medical College in 1895, died in Geneseo, November 6, aged 87.

PAUL BERNARD HEADLAND, Galesburg, formerly of Chicago, who graduated at Loyola University School of Medicine in 1919, died suddenly of a heart attack while attending a basketball game, January 7, aged 60.

MARION D. HENDERSON, Franklin, who graduated at Physio-Medical College of Indiana, (Indianapolis) in 1895, died recently, aged 81.

EDGAR REA HOLMES, Minier, who graduated at College of Physicians and Surgeons of Chicago in 1887, died in Mennonite Hospital, Bloomington, November 16, aged 84.

CHARLES G. JOHNS, retired, Chicago, who graduated

at Jenner Medical College in 1910, died December 23 of pneumonia, aged 70.

EDWARD E. LESCH, retired, Chicago, who graduated at College of Physicians and Surgeons, Keokuk (Ia.) in 1887, died January 27, aged 88. He had practiced medicine in Ivesdale, Illinois, from 1888 until 1934.

FRANK H. LIESEN, retired, Quincy, who graduated at Fort Wayne College of Medicine (Ind.) in 1897, died January 18, aged 77.

EDWARD AMES LYON, Chicago, who graduated at Rush Medical College in 1896, died recently, aged 77.

ALEXANDER EDWIN MCCORNACK, Elgin, who graduated at University of Illinois College of Medicine in 1911, died January 26, aged 63. He was on the staffs of the Sherman and St. Joseph's Hospitals in Elgin.

GEORGE ALBERT SIHLER, Litchfield, who graduated at McGill University Faculty of Medicine in 1910 (Montreal) died January 8, aged 62. He was chief surgeon for the Superior Coal Company at Litchfield.

RUSSELL VERNON THOMAS, Manteno, who graduated at University of Louisville School of Medicine, Louisville, (Ky.) in 1910, died January 13, aged 65. He was on the staff of St. Mary's Hospital in Kankakee and surgeon for the Illinois Central Railroad at Manteno.

FRANK TOMBAUGH, Burlington, (Ia.), formerly of Odell, who graduated at Northwestern University Medical School in 1896, died December 29, in Burlington.

JOHN WYMAN WHITESIDE, retired, Chicago, who graduated at Rush Medical College in 1894, died January 16, aged 91.

CLAUDE C. WOOD, Medora, who graduated at State College of Physicians and Surgeons, Indianapolis, in 1907, died suddenly, January 13, aged 67, of a heart attack.

KASIMIR ANTHONY ZURAWSKI, Chicago, who graduated at the University of Illinois College of Medicine in 1899, died January 24, aged 79. He was formerly professor and head of the Department of Dermatology and Syphilology at Loyola University School of Medicine.

"For The Common Good"

Lectures on Adult Health.—Dr. W. W. Bauer, Director, Bureau of Health Education of the American Medical Association, gave the first in a series of public lectures on adult health problems in Oak Park, February 15, when he discussed "Fair, Fat and Past Forty." Subsequent lectures are:

David Slight, superintendent of the Veterans Rehabilitation Centers, February 22, on Nervousness and Its Causes.

Maurice Cottle, professor and head of the department of otolaryngology, The Chicago Medical School, March 1, on Seeing, Breathing and Hearing.

Howard A. Lindberg, associate in medicine, Northwestern University Medical School, March 15, Take Care of Your Ulcer.

Gilbert H. Marquardt, assistant professor of medicine, Northwestern University Medical School, March 29, Growing Old Gracefully.

John T. Reynolds, clinical assistant professor of surgery, University of Illinois College of Medicine, April 5, "What About Cancer?"

James H. Hutton, consulting endocrinologist to Illinois Central R.R., C. & E. I.R.R., Elgin State Hospital and Carnegie-Illinois Steel Corporation, April 12, "How's Your Blood Pressure?"

Dental programs were offered March 8 and March 22, and the last lecture in the series will be given April 19 by Dr. Earl E. Kleinschmidt, newly appointed full time health officer of Oak Park. The medical series was arranged by the Educational Committee of the Illinois State Medical Society for the cooperating groups sponsoring the public meetings: Oak Park Health Department, Oak Park and River Forest Physicians Club, West Suburban Chapter, Chicago Dental Society, Oak Park Chamber of Commerce, Oak Park Board of Education and the Chicago Dental Society.

Health Telecasts Over WGN-TV.—"Your Growing Child" was the theme of the program over WGN-TV, Thursday, February 10, with Dr. John L. Reichert, associate in pediatrics, Northwestern University Medical School, and president of the Chicago Pediatric Society, as the specialist. Two patients of Dr. Reichert's, Billy, aged 2, and Johnnie, aged 4, appeared on the program with their mother, Mrs. John W. Neal.

"Splint 'Em Where They Lie" was dramatically demonstrated in the telecast, February 17. Dr. Eugene A. Hamilton, clinical instructor in bone and joint surgery, Stritch School of Medicine of Loyola, used patients and demonstrations to tell the story of fractures and their possible complications.

"Your Child's Eyes" was the title of the telecast, February 24, with Dr. G. Henry Mundt, Jr., Chicago, as the specialist. Patients, instruments and charts were all used to enhance the story.

Dr. Edwin Levine, director of chest service at Michael Reese Hospital, told the story of tuberculosis, using patients, charts and x-rays, in the program, March 3.

The programs are part of the weekly health education series developed by the Educational Committee of the Illinois State Medical Society in cooperation with WGN-TV. Dr. Theodore R. Van Dellen, Medical Editor of the Chicago Tribune, and assistant professor of medicine at Northwestern University Medical School appears on all programs as moderator.

Lectures Arranged Through the Scientific Service Committee of the Illinois State Medical Society; Robert S. Berghoff, Chicago, Chairman; Louis R. Limarzi, Chicago, Vice Chairman:

Norbert C. Barwasser, Moline, Fulton County Medical Society in Canton, January 20, on Dermatologic Allergy in Practice.

Walter R. Tobin, Chicago, Macon County Medical Society in Decatur, January 25, on New Developments in Coronary Disease.

Harry Leichenger, Chicago, Kane County Medical Society in Elgin, Present Day Management of Communicable Disease.

Earl Latimer, Chicago, La Salle County Medical Society in La Salle, February 10, on Gastric Surgery, illustrated.

George Hellmuth, Chicago, Iroquois County Medical Society in Watseka, February 15, on Coronary Disease.

Harry J. Dooley, Oak Park, Northwest Branch, American Academy of General Practice, February 18, on Approach of Socialized Medicine and How to Combat It.

Francis E. Seneer, Chicago, DeKalb County Medical Society in DeKalb, February 22, on Common Skin Diseases.

H. W. Wellmerling, Bloomington, La Salle County Medical Society in Bloomington, March 10, Fractures, illustrated.

John W. Huffman, Chicago, Effingham County Medical Society in Effingham, March 17, on Office Gynecology.

Roland R. Greene, Chicago, DeKalb County Medical Society in DeKalb, March 22, on Gynecologic and Obstetric Endocrine Problems, illustrated.

Ben W. Lichtenstein, Chicago, McDonough County Medical Society in Macomb, March 25, on Multiple Sclerosis.

Charles Dunham, Chicago, Kankakee County Medical Society in Kankakee, April 8, on Rheumatoid Arthritis with Particular Reference to the Differential Diagnosis of Rheumatoid Arthritis and Gout, Disseminated Lupus and Scleroderma.

Henry Buxbaum, Chicago, Macon County Medical Society in Decatur, April 19, on Common Obstetrical Problems.

Richard Allyn, Springfield, Logan County Medical Society in Lincoln, April 21, on Nephritis.

Paul A. Campbell, Chicago, McDonough County Medical Society in Macomb, April 22, on Differential Diagnosis of Hearing Disorders.

Dr. Philip Thorek, Chicago, Will-Grundy County Medical Society in Joliet, Vagotomy for Peptic Ulcer and Ulcerative Colitis, illustrated.

Lectures Arranged Through the Educational Committee of the Illinois State Medical Society; Charles P. Blair, Monmouth, Chairman; Warren W. Furey, Chicago, Vice Chairman:

Charles E. Pope, North Shore Chapter, American Veterans Committee, January 26, in Winnetka, Compulsory Health Insurance.

Mr. John W. Neal, Evanston Catholic Woman's Club in Evanston, January 30, on Socialized Medicine; Threshold of the Welfare State.

Film, When Bobby Goes to School, for Dr. Matthew M. Steiner, Chicago, for month of February during health program.

Mr. John L. Bach, Chicago, Peoria Medical Society Woman's Auxiliary in Peoria, February 1, on Pickpocket Medicine.

Mr. Daniel J. Connor, director, division of health education, Chicago Department of Health,

Humboldt Park Civic League, in Chicago, February 1, How Can You Help Your Community.

Charles D. Krause, Chicago, Brainard Civic Association in Chicago, February 2, on Socialized Medicine.

Paul J. Starceвич, Woodlawn Lions Club, February 3, on Compulsory Health Insurance.

Percy E. Hopkins, Chicago Woman's Aid Legislative Committee, February 7, on National Compulsory Sickness Insurance.

Esther S. Hodel, Morton, Junior Woman's Club of Flanagan, February 10, on Telling Our Children.

Mrs. Madeline Roessler, supervising nurse, Cook County Department of Public Health, St. Viator's Girl Scouts in Chicago, February 10, on Personal Hygiene.

Marc Hollender, Physicians Fellowship Club Auxiliary in Chicago, February 11, on Growing Old Gracefully.

Harlan English, Danville, Kiwanis Club in Mount Carmel, February 15, Compulsory Health Insurance — 1949 Style.

Percy E. Hopkins, Roseland Kiwanis Club in Chicago, February 15, on Compulsory Health Insurance.

Harold W. Miller, Professional Schools, YMCA., Chicago, February 16, National Compulsory Health Insurance.

Walter C. Bornemeier, Chicago, Northbrook Rotary Club in Northbrook, February 17, on National Compulsory Health Insurance.

Robert R. Mustell, Men's Club of the Essex Community Church, in Chicago, February 21, Compulsory Health Insurance.

Percy E. Hopkins, Rosary College Alumni Association in Chicago, February 22, on National Compulsory Health Insurance.

Dwight Clark, Chicago Engineers Club, February 22, on Influence of Modern Methods and Drugs on Surgery, with particular reference to atomic fusion.

Mr. John W. Neal, West Suburban Republican Woman's Club, in Western Springs, February 24, Socialized Medicine: Threshold of the Welfare State.

Mr. George E. Hall, staff associate, Bureau of Legal Medicine and Legislation, A.M.A., Aux-Plaines Branch Auxiliary to Chicago Medical Society in Oak Park, February 25, on Current Medical Legislation.

Mr. John W. Neal, Toman Public Library Forum, in Chicago, February 25, National Compulsory Health Insurance.

Harold M. Camp, Monmouth, Kiwanis Club in Aurora, March 1 on Taxes, Taxes and more Taxes.

Howard Brower, staff associate, Council on Medical Service, AMA, Sauganash Woman's Club, March 1, Voluntary Prepayment Medical Care Plans.

Joseph T. O'Neill, Ottawa, Princeton Hospital Auxiliary in Princeton, March 8, on Socialized Medicine.

Lawrence Rember, AMA, Woman's Auxiliary to the Chicago Medical Society in Chicago, March 8, Medical Public Relations Program for a Woman's Auxiliary.

Robert Hagan, Ivanhoe Junior Woman's Club, in Chicago, March 8, on Childhood Disorders: Physical and Mental.

Film: Human Reproduction, for Young Woman's Christian Association of Chicago, March 10.

David Slight, Burnham School of Cosmetic Hygiene in Chicago, March 15, on Mental Hygiene with some Reference to Psychosomatic Medicine.

Robert R. Mustell, Chicago, the Columbus School Parent Teacher Association, the Rotary Club and the Ottawa Woman's Club, at three separate meetings in Ottawa, March 16, on National Compulsory Health Insurance.

Mr. John W. Neal, Englewood Branch Woman's Auxiliary, March 24, on Socialized Medicine: Threshold of the Welfare State.

Arthur H. Rosenblum, Mothers of Triplets, in Chicago March 25, on Child Guidance.

Norman T. Welford, La Grange, Tinley Park PTA, April 1, on Emotional Problems of Children.

Harlan English, Danville, Edison Electric Institute in Chicago, April 5, on Rural Health and Sanitation: A Challenge to the Electric Industry.

Warren W. Furey, Chicago, Woman's Auxiliary to Vermilion County Medical Society in Danville, April 5, Ten Point Program of the AMA.

Louis River, Oak Park, Crete Woman's Club in Crete, April 8, on Facts You Should Know About Cancer.

George Weber, Waukegan, Lake County Federation of Women's Clubs in Grayslake, March 4, on Growing Old Gracefully.

Walter Stevenson, Quincy, Lions Club in Centralia and a joint meeting of the Centralia Senior and Junior Woman's Club, March 15, at noon and three o'clock, respectively, on Compulsory Health Insurance, and a Tri-County Medical Society meeting in the evening on Squints—A Social and Economic Problem.

William B. Raycraft, Oak Park, Mary Lyon PTA in Chicago, April 19, on Diseases of Childhood.

The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

Harold M. Camp, EDITOR.

Theodore R. Van Dellen, ASSOCIATE EDITOR.

EDITORIAL BOARD — James H. Hutton, Chairman, Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher, Harry Culver, Walter Stevenson, Raymond W. McNealy, Arkell M. Vaughn.

Vol. 95, No. 4



April, 1949

THE 1949 ANNUAL MEETING

In this issue of the Illinois Medical Journal we are publishing the program for the Annual Meeting to be held May 16-18 at the Palmer House, Chicago. Once more the meeting begins on Monday and will continue until 5:00 P. M. Wednesday, May 18. An excellent general assembly program has been scheduled, which should be of interest to all members of the Society.

The Sections holding their own meetings have arranged short programs in order that there will be the least possible interference with the general assembly sessions. The usual number of luncheon and dinner conferences will be conducted this year, as they have in the past.

The House of Delegates will hold its first meeting on Monday afternoon at 3 o'clock, and the second meeting has been scheduled for 9:00 A. M. Wednesday. There will be much business to be transacted by the House of Delegates, and every component County Society should see to it that they are represented by one or more delegates, the exact number being determined, in accordance with the By-laws, by the number of member on the Society roster.

The Technical Exhibits, as usual, will be displayed in the large exhibit hall in the Palmer House, and there will be many exhibitors anxious to show the members what their respective concerns have done during the past year in develop-

ing newer drugs and accessories to help the medical profession.

Scientific Exhibits will again be presented in the Red Lacquer room and every booth has been allocated to the many scientific exhibitors. The Exhibit Hall and Red Lacquer room will be open each morning at 8:00 o'clock, and will remain open until 6:00 P. M. during the meeting.

Tuesday evening is devoted to the Annual Dinner honoring the retiring President, and with all past presidents as guests. This year a shorter program has been arranged, which should meet with the popular approval of the many members and their guests who will be present at this important function. An interesting talk has been arranged which should appeal to all present.

It is hoped that every member of the state society will read the program, and arrange to be present at the meeting. It would be wise to write for hotel reservations at the earliest possible moment, so that the desired type of accommodations may be procured. There will be some changes, and additions to the program as published in this issue of the Journal, all of which will appear in the official program to be handed out to all who register at the meeting.

Scientific films, many of which have been made by members of the Society, will again be shown during each day of the annual meeting, in a

special room, a feature which proved so popular at the last annual meeting. Information concerning these films will be found in the program, and they should be viewed by all members and guests present at the meeting.

THE A.M.A. SPECIAL ASSESSMENT

There have been quite a number of comments in the press in recent weeks relative to the reaction on the part of members to the special assessment unanimously approved by the A. M. A. House of Delegates at the Interim Session held last December in St. Louis. Commentators over the radio have likewise discussed this matter, some of these insisting that the response is disappointing to the A. M. A., and even predicting that there will be an increasing resentment as time goes on. It has been stated that some large county societies have refused to pay the assessment, and have passed resolutions to that effect.

We do not know the exact status in other states, but in Illinois we do know that the response has been most gratifying, and there have been relatively few protests and refusals to pay the assessment. In a few county societies, the special assessment was collected and sent to the State Society Secretary's office before annual dues for members had been received.

We have already noted a number of county societies in which the assessment has been paid by every member. The first Society in Illinois to report 100% payment was Clay County, and within a relatively short time five or six other societies likewise remitted the payment for all of their members. In the 102 years the American Medical Association has been operating, this is the first assessment that has ever been made, for any purpose whatever, even though it is stated in the By-laws that such an assessment, if approved by the House of Delegates, can be asked for.

In Illinois, there has been some confusion relative to the manner in which the assessment is handled. Letters have gone to all county society secretaries asking that the assessment check or checks be sent to the State Society Secretary, but in a few instances they have been sent direct to the American Medical Association. The State Society is anxious to have a complete record of remittances from all component so-

cieties, and acknowledgment cards go to all who have paid the assessment, and credits are properly noted on the record cards.

When the remittance goes to the A. M. A., the State Society receives that information from the A. M. A., then must get the names and addresses for those paying same, which means more work on the part of the two offices. At this time the remittances from county societies are coming in daily, and are being recorded and acknowledged as rapidly as possible.

From present indications and reports from many county societies we believe that Illinois will at least be in the 90% class when the returns are complete, and many of those not paying it will be elderly or incapacitated members on limited service, or those exempt from all dues and assessments, in accordance with the By-laws of this Society.

PHYSICIAN AND DENTIST NEED IS CRITICAL IN ARMED FORCES

(Statement by Secretary Forrester at Press Conference)

I have called you here for this press conference in order to acquaint you with a situation that we believe will assume serious proportions within the next several months.

The plain fact is that the Armed Forces are faced with a shortage of physicians and dentists which at this point is critical.

Unless sufficient physicians and dentists come forward now and volunteer for service, our entire national defense program may be gravely handicapped.

Here are some of the basic facts:

By July of this year we will have lost almost one-third of the physicians and dentists who are now in the Armed Forces. An overwhelming majority of these are former V-12 and ASTP students whose tours of duty have been completed.

This new loss means that the Armed Forces will not have enough professional men to give necessary medical services to the almost 1,700,000 men and women who are serving their country.

We are pledged to give that service, but our Government will most certainly fail to do so

unless we obtain sufficient professional manpower. Without an adequate number of qualified medical personnel we would be helpless in the event of any unusual crisis.

There are 15,000 young physicians and dentists in America today who were deferred from the draft and excused from combat in order to complete their professional education. Of this group, 8,000 received all or part of their professional training at government expense — the remaining 7,000 paid for their own education, but were excused from the draft and combat service.

Here are a few more details about the over-all problem:

By the end of July 1949, we will be short about 1,600 physicians and about 1,160 dentists. By next December this shortage will grow to 2,200 physicians and 1,400 dentists.

We will have no one to take the place of these men other than those who are obtained through normal procurement. This method is still not sufficient to meet our needs. Last month, for example, we commissioned only 30 physicians and 20 dentists through our regular procurement channels.

Here is an excerpt from a memorandum which I received within the past few days from Mr. W. Stuart Symington, Secretary of the Air Force:

"... The situation in the medical services of the Air Force has been rapidly deteriorating due to the shortage of doctors. There has been a decrease of 27% in Medical Corps officers and the outlook for the months ahead on this score is dark. The Air Force is in a critically serious situation with respect to its medical component. We are in grave trouble and it is getting worse."

Here is a statement from the Under Secretary of the Army, William H. Draper, Jr:

"In the Army the situation is more serious than in the Air Force. There is now serious doubt that there are sufficient doctors to provide the necessary medical care of personnel on active duty in the Army."

That is part of the situation. Only some dramatic event, or series of events, which will cost us dearly in health and higher death rates will point it up. We certainly do not wish this to happen.

We are doing everything within our power to avert it.

We have several alternatives before us:

1. We can ask for a draft of physicians and dentists in the amount needed to provide these adequate services. We are reluctant to request this step.

2. We can ask the physicians and dentists who already have served in World War II and who have reserve commissions, to come back into service.

3. We can issue an order which will hold some of the men now on active duty and whose service time is actually up.

Neither of the latter two steps is desirable, or even fair.

4. We can ask for volunteers from the 15,000 men whom we educated as physicians and dentists and who have not served, and those who were deferred to complete their education and did not serve.

I believe these 15,000 men who saw no service overseas and who were not exposed to the rigors of war will themselves recognize our right to appeal to them to make a contribution in this emergency.

From the ranks of these men we should obtain the replacements for those who have served and who are now entitled to return to civilian life if they desire. In a democracy, this procedure is fair, equitable, and just; and we propose to make our appeal to these former ASTP and V-12 students before taking more drastic steps. As Americans, I am confident that they will recognize their obligations if they are acquainted with the facts.

You are entitled to know some of the steps we are now taking to urge these men to discharge their duty to their country and to aid in this emergency.

1. Within the next few days, I shall write a personal letter to many of the 8,000 men who have been trained by the Armed Forces at the expense of the Government to be physicians and dentists and who have thus far given little or no service in return. I shall invite them to accept commissions in the Armed Services.

2. I am appealing to the 7,000 men who were deferred and who completed their education at their own expense to volunteer and accept commissions. We are asking local professional leaders to get in touch with these men.

3. I have asked my Deputy for Medical and Allied Professional Matters, Mr. Charles P. Cooper, through the Armed Forces Medical Ad-

visory Committee, to conduct an active campaign for medical and dental personnel. I have requested him to make simultaneously an intensive study of the utilization of this medical manpower and of the workload in the Armed Forces in order to make certain that none of it is wasted and that, in so far as possible, each of these volunteers serves in an assignment commensurate with his professional skill and ability.

On this Committee, in addition to the Surgeons General of the Army and the Navy, and the Air Surgeon, there are 11 distinguished civilians. I have asked them to be present at this press conference, and I should like to introduce them to you:

Dr. Raymond B. Allen of Seattle, Washington

Dr. Francis J. Braceland of Rochester, Minnesota

Dr. Edward D. Churchill of Boston, Massachusetts

Dr. Michael DeBakey of Houston, Texas

Dr. Paul R. Hawley of Chicago, Illinois

Dr. Daniel F. Lynch of Washington, D. C.

Dr. Richard L. Meiling of Columbus, Ohio

Dr. Maurice C. Pincoffs of Baltimore, Maryland

Dr. Howard A. Rusk of New York City

Dr. Walter H. Scherer of Houston, Texas

Dr. Paul Titus of Pittsburgh, Pennsylvania

4. This Program is a joint undertaking of the Armed Forces, the American Medical Association, the American Dental Association, and other allied professional groups from their national offices down to the local communities. We shall furnish these groups with the names of many of the doctors in their communities who received this Government training. We shall ask them to seek out others. I shall ask them to interview these men personally and to urge upon them the critical needs which face the Armed Forces.

5. These local professional groups will be asked to report to me as soon as possible the results of their personal contact with these young doctors.

6. I have asked the heads of the veterans' groups to assist us in this campaign of enrolling physicians and dentists in the Armed Forces.

7. I shall ask the deans of the medical schools and the heads of hospitals to cooperate with us.

8. I am asking public support and under-

standing in this campaign to fill our needs.

It should be made clear to the various communities in America that we are not making an effort to obtain doctors from sorely needed areas, nor creating any further shortage of physicians and dentists in civilian medicine. In the next few months over 4,000 young men, trained by the Government in wartime and who now have finished their two-year tour of duty, will be returning to civilian life. We are only replacing these physicians and dentists who will be going from active duty to civilian practice.

In addition, arrangements will be made by the services to allow those who volunteer at this time to finish their current training periods before being called to active duty. Calls to active duty will be staggered so as to cause minimum disruption to civilian hospital training programs.

It is our sincere hope that this campaign will succeed. If it does not, then we shall be forced to resort to more drastic means, such as holding men in the service beyond their normal time or asking Congress to pass a draft law.

We do not wish to take either of these steps, but failure in this campaign will force us to take both of them.

We have an obligation to the millions of persons concerned. These include the men and women in the Armed Forces themselves, and the fathers and mothers of these men and women who depend upon the pledge of this Government to take care of the medical needs of those who serve their nation throughout the world. They also include the citizens of the nation, who in this democracy have the right to expect that those who serve them in the Armed Forces will be provided with adequate medical care.

The physicians and dentists of America have always responded to such needs as now face us. We are asking them to respond again. I am sure that, if they understand the present needs, they will respond again.

MORE SPEAKERS NEEDED!

Outline of National Education Program

Under the direction of the special committee set up by the Council of the Illinois State Medical Society at its last meeting, a "speakers' conference" to activate the Illinois front in the National Education Campaign of American

medicine was held in Chicago February 27, 1949.

It was the second meeting held by Illinois. A conference of county officers was held in Springfield in December to discuss the decisions made by the A.M.A. House of Delegates earlier at St. Louis.

The February meeting, called by the Society's special action committee — Percy E. Hopkins, M.D., Chicago, president; Harry M. Hedge, M.D., Chicago, chairman of the Council; Harold M. Camp, M.D., Monmouth, secretary; and Edwin S. Hamilton, M.D., Kaukaee, Councilor — brought together representatives of county and branch medical societies whose secretaries had been invited to nominate two or three potential speakers for the purpose.

Through Mrs. L. N. Hamm, Lincoln, state president of the Woman's Auxiliary, a strong delegation from the auxiliary also attended.

The purpose was, first, to outline to them the details of the program set up nationally, and, second, to enroll them as "minute men" speakers in the campaign. It was a successful meeting throughout.

About 150 in all registered, including 60 representing 35 of the 90 downstate county societies and 34 representing eleven of the fifteen branches of the Chicago Medical Society. The registration produced 93 speakers, most of them new to the work (though some were the wheel-horses who have been carrying the load hitherto): 73 came from downstate, 6 from the auxiliary and 14 from Chicago.

More speakers are needed immediately, especially from Cook County. The demand from numerous organizations of all types for speakers to explain the threat of compulsory health insurance is rising rapidly and almost daily there are meetings of important groups where special efforts should be made to place speakers. A few men should not be obliged to take all the responsibility and now is our time to take advantage of existing interest to tell our story.

Dr. Hopkins, in explaining the campaign, announced that a new speakers' bureau has been established in the office of the society's public relations counsel. All who are willing to familiarize themselves with the details of the problem and give talks explaining what is wrong with compulsory sickness insurance should immediately communicate with that office, from which material will be forwarded and assign-

ments arranged. Full records will be kept of all speakers and their engagements.

There is need, too, of able lay speakers, especially men with experience in public meetings, such as ministers and lawyers, who are interested in the subject and willing to help keep politics out of their medical care. Enroll them with the speakers' bureau for material and dates.

Every registered speaker, in addition to the usual material, is being supplied with a set of "speaker's notes," brief statements of ideas, arguments, statistics and other essential material, such as he would himself collect if he were doing his own research in preparation for an address. The material is mimeographed on pocket-size cards. It is intended to save busy doctors the time required for research and note-taking, to present the facts of the problem accurately and thus eliminate misunderstanding and misinterpretation, and to cover the subject thoroughly in the briefest possible space. At the same time, since every possessor of a set is kept recorded in a special file, the preparation and mailing of additional or substitute cards, as required, will make it possible to keep Illinois' speakers up-to-date within 48 hours as changes develop in the situation.

Copies of the "speaker's notes" have already been supplied for readaptation locally to Ohio, Nebraska, Missouri, Oklahoma, Iowa and New York, as well as to the A.M.A. and to Whitaker & Baxter. It has been necessary to order a second printing to keep up with the demand.

Every county society not represented at the speakers' conference has since been supplied with a list of nineteen instructions which outline in detail for Illinois the duties imposed on the Illinois State Medical Society by its participation in the national education campaign.

Each county or branch secretary should see that these duties are carried out as far as possible under the particular circumstances of each jurisdiction.

In case of doubt each secretary is invited to communicate with Harold M. Camp, M.D., Secretary, Illinois State Medical Society, Monmouth, Ill., while speakers should be registered with the Speakers' Bureau, Illinois State Medical Society, Room 509, 185 North Wabash Avenue, Chicago 1, Illinois. Financial 6-3245.

MEDICAL ECONOMICS

The Medical Economics Committee. Chauncey C. Maher, Chmn., Hubert L. Allen, Emmet B. Bay, Edwin F. Baker, Carroll Birch, Thomas C. Browning, Roland R. Cross, James Graham, George Halperin, Edwin S. Hamilton, Ford K. Hick, Edwin F. Hirsch, May McDonald Milligan, Marie Wessels, Walter M. Whitaker, Holland Williamson.



Our Benevolence Fund

Oscar Hawkinson, M.D.
Oak Park

That every organization should endeavor, in so far as possible, to give aid and assistance to those of its own who are in need, is a fact as little disputed as any verse in the Catechism. Some groups are organized for this special purpose, while others, not so organized, exert themselves to care for unusual hardship. Our medical society is primarily planned for scientific purposes, with every other activity of secondary importance.

It has long been noted that occasionally one of our members, probably through no fault of his own, finds himself in difficult financial circumstances, and for this reason plans have been studied as to the best method of relieving his distress. A number of years ago the establishment of a home for the destitute of our profession was given wide study, extensive surveys were made of the subject with the conclusion that this plan was not sound.

The Los Angeles Medical Society by popular subscription has secured a fund of \$100,000.00, interest on which is used for the care of its needy.

This energetic society is now in the process of raising another hundred-thousand.

About ten years ago our House of Delegates authorized the appointment of a Committee on Medical Benevolence, and set aside from its general treasury sums required to give assistance to those of our members and their dependents, who because of some chain of events may have fallen on difficult times. This effort seems to have met with universal approval, one reason perhaps being that all know that fortune is a fickle jade whose frown is sometimes deadly, and may fall when and where least expected. The Woman's Auxiliary may well be given much credit for this action, which was brought before the House by the late John S. Nagel, who was the first chairman of the Committee. The benefits were limited by the House to \$30.00 per month, later increased to \$50.00. In 1948 Robert S. Berghoff, then President of the society, recommended to the Council, that the society make an effort to secure by subscription, a sum

large enough which when properly invested would yield sufficient income "for our needs." A vigorous effort was made along this line, every member of the society was solicited, and in some of the local societies earnest drives were inaugurated with rather poor results, only a few county or local societies succeeded in interesting its members. The ten thousand members of the society to date have contributed about \$11,000.00, of this amount \$2500.00 came from the Aux Plaines Branch of the Chicago Medical Society, \$500.00 from the Englewood Branch, and \$500.00 from the Will-Grundy County Branch, while about \$3000.00 was contributed by the Woman's Auxiliary to the Illinois State Medical Society.

The need for this service and the responsibility of the society is so clearly evident, that a few of those given assistance might be described. A young man in his late thirties developed minimal tuberculosis and was advised by his medical attendant, that a six months rest was in order. He made a good recovery and is working again. A 77 year old member of the society was found in the terminal stages of prostatic cancer, the wife for 18 months had been bed-ridden with a fractured hip, no income. The small contribution from the society helps greatly to lessen the burden of providing a livelihood. One of the great medical teachers of his day, after two years of illness, left his widow now 91 years of age, in straitened financial circumstances, this is now being relieved by a monthly check. These are typical examples of the needy for whom your society is now providing assistance.

Many of our members throughout the state, have given much thought and study to the problems of securing these needed funds. A number of our component societies including Henry County, sent resolutions to the House of Delegates in May 1948, asking for an increase in dues, ranging from three to five dollars annually per member which would maintain this Benevolence Fund. There was some reluctance on the part of the Committee and others to change our present plan, but the House of Delegates without a dissenting vote, decided that five dollars should be added to our annual dues, the amounts necessary to care for our beneficiaries to be paid from this sum, and the balance placed in a reserve, this reserve would eventually grow to such an amount, which properly invested

would provide sufficient income to care for our wants. This project should continue to receive careful study. Investment of surplus funds under proper safeguard is important, adequate supervision of investments, care in selecting a proper depository are all essential.

In a great nation such as our own, where capitalism flourishes at its best, there will always be periods of quickened industrial output and great employment which we call prosperity, and because of a later decreased demand for all commodities, periods of lessened production, lessened output occurs, result being less demand for workers and smaller pay checks, this is called a recession or a depression.

William Allen White, writing of the panic of 1893, which was typical of all depressions said, "enough railroad, wires, pipes and girders, had been laid to complete the needs of that generation." Factories making these products laid off workers, steel mills providing the raw material for these industries closed their blast furnaces, demand for coal to operate these great mills fell away, and many mines were closed and workers walked the streets. All of this reduced money available for the purchase of clothing, food, fuel and other necessities of life, making for a full fledged depression.

These periods have occurred repeatedly throughout the entire history of the world, and will continue to do so. Following the same pattern, they are caused by various conditions, most of which are not in the control of man, such as droughts, floods, epidemics, wars, etc. The wise man is he who knowing past history will make provision for the time when again depression strikes. At this time because of our tremendous national debt and further threats of war, our next depression will probably be very severe, and when extreme optimists hopefully discuss the payment of our national debt in the next fifty years, it is probably only wishful thinking, and if history continues in the making as in the past, there will be at least two major depressions in that time with an increase instead of a diminution of our national debt.

We as individuals are borne along in the current of our times, and perhaps can do little to change the trend, but the human race is possessed of a vigor and a vitality which is almost incredible. Having survived again and again the ravages of floods and earthquakes, recessions and depres-

sions, wars and pestilence, only to emerge on a little higher level of education, standard of living and prosperity. These are matters to be seriously considered in planning our future.

Medical men are by training and education individualists, and it may well be that if present trends of government are not changed, we may for several centuries be the last of this tribe. Should this trend continue and government ownership whether it be called communism or socialism sweep the world, it will be only a repetition of that which has existed before and failed, failed only because never changing human nature is what it is.

To strive only for the common welfare, with no thought of personal gain, is a pleasant theory which has been tried repeatedly both on a large and a small scale, always with failure as the result. It always starts with, or leads to dictatorship and tyranny, degrades the individual to the level of a beast, forced to subsist on the products of the combined efforts of workers who are driven by their over-lords, the politician and the bureaucrat who fails not to procure for himself the choice fruits of another's toil. If we had a standard man, if all men were created equal in genius and ability, equal in energy and endurance, equal in drive and ambition, equally dumb or equally bright, socialism might prosper and thrive, but since men are not created equal in ability or ambition, it will always fail and justly so, since he who contributes much to the welfare of society is certainly entitled to a greater reward from society than the one who for any reason or reasons contribute little or nothing. No kind of progress toward any degree of perfection could ever be made without the many different types of individuals which we see, and no ground has ever been laid in human conduct or action which could ever make the establishment of socialism or communism a success.

The medical student having acquired his degree, hopes then to be able to render a service to the community, the returns from which will provide for himself and family a livelihood, sufficient funds to educate his children, and a competence to care for his unproductive years. Fortunately for the practitioner of medicine there is no fixed retirement age, the years as they go by, while they take from him insidiously, his usual strength and vigor give him a rich and useful experience which is always prized

and sought after by his patients, so that we have in our state society men in their eighties who do not hesitate to make a twenty mile drive in the country in response to the call of someone whose needs they can best supply.

The first problem confronting the young doctor, an important one, is where to locate; the first consideration should be, where can I live most comfortably and happily, and where can I best care for a family; secondly the economic condition of the community is important, and third what are the hospital facilities. This is placed last because as is well known, very good medicine has been practiced in this country when the medical men had only his own resourcefulness upon which to depend.

The practice of medicine is a highly competitive calling and very few men can establish themselves in a community in less than five to ten years. After these years one's income is usually assured, and whether this be large or small, some part of it must be set aside for that inevitable time, when the ravages of the years have taken their toll. First of all then life insurance as much as one can afford is a must, a limited payment policy of twenty years or even fifteen in a good line company should be bought up to the age of 55 years. This offers good protection for the family, and assurance of a reserve if the need should arise. Next in order is an annuity which should be purchased in a well established company, and only after studying well the reservation clauses, which in certain events may permit the company to reduce its monthly payments.

It is often said that medical men naturally understand little about business. This should be regarded as a malicious slander. If doctors of medicine spent as much time in studying business practices and business methods as they do in caring for their patients, there is hardly one who would not acquire competent riches, but since practice of the healing art is a profession and not a business, acquiring of money becomes of secondary importance. Doctors obviously expect that their knowledge and skill used in the care of the sick, and properly compensated, will provide them and their families a means of livelihood with probably something left over for the common good. After these needs are cared for real estate offers the safest and most desirable investment for any reserve funds, and if

one is in a community where good farm lands are available, nothing could be better than a good farm, and since investments do require some attention, speculating in the stock market offers about the poorest and most expensive entertainment in which a doctor could engage.

With all of our planning one should bear in

mind that there is but one financial transaction which never fails, namely, the regular and prompt payment of taxes. Life at best is a precarious adventure, and while our training teaches us to be quick to render service to those in need, we cannot with a clear conscience neglect our own.

**STUDY NEW TREATMENT
FOR SKIN DISORDERS**

Psoriasis, a skin disease characterized by patches covered with silvery white scales, and neurodermatitis, an itching eruption due to nervous disorder, respond to treatment with undecylenic acid, according to Henry Harris Perlman, M.D., Philadelphia.

Undecylenic acid is a drug which resembles the natural oils of the skin.

Writing in the February 12 issue of *The Journal of the American Medical Association*, Dr. Perlman says: "Seventeen patients with chronic psoriasis, both localized and generalized, were given gradually increased doses of undecylenic acid by mouth for varying periods of time, with improvement in the psoriasis characterized by disappearance of the lesions, permanent relief of the itching, and, in several instances, disappearance or improvement in joint pains.

"Undecylenic acid has been tried on a small number of patients with neurodermatitis and appears to have a definite effect on the lesions.

"Definite claims for undecylenic acid cannot be made from the comparatively small number of patients studied. However, undecylenic acid seems to hold a great deal of promise in the improvement and possible prevention of recurrences of psoriasis and neurodermatitis."

At present it seems that the greatest benefit from undecylenic acid in the treatment of psoriasis is in the subacute and chronic lesions which are more or less generalized on the body, according to Dr. Perlman. In psoriasis of only a few years' duration, remarkable improvement was noticed after two or three weeks. In some patients, however, clinical response was not noticed until after three months, when large plaques of

psoriasis were soon replaced by normal skin, he says.

"With the continued use of undecylenic acid before and after the skin has cleared up, new lesions fail to appear and in those few instances in which new lesions appeared they seemed to be short lived, disappearing spontaneously," Dr. Perlman reports.

"It is highly probable that the recurrence of psoriasis can be prevented, at least in a significant proportion of cases, by a maintenance dose of undecylenic acid."

Although the drug in its present form produces belching, nausea, diarrhea, and other symptoms when taken by mouth, most such undesirable reactions can be eliminated by development of coated capsules and by temporary discontinuance of treatment, Dr. Perlman indicates.

Describing the results of undecylenic acid therapy for neurodermatitis, he says that a 37-year-old housewife who had been treated unsuccessfully with various medicines and ultraviolet rays for lesions and severe itching of the upper eyelids was given undecylenic acid in capsules. After about a month of treatment, the itching disappeared and her eyelids became smooth.

Another housewife, 27 years of age, was extremely nervous and worried and had had a rash on her neck five months. She had been treated with various medicines without improvement. After about two weeks of undecylenic acid therapy the rash was scarcely noticeable and the itching had completely disappeared. When she was last seen only a slight redness remained where the rash had been.

"Until carefully controlled scientific investigations have been carried out, one can only speculate how undecylenic acid produces its effect on the skin in psoriasis and neurodermatitis," Dr. Perlman says. "Psoriasis may be due to a metabolic disturbance, but this is purely speculative."

STATE DEPARTMENT OF PUBLIC HEALTH



The Status of Public Health in Illinois

Roland R. Cross, M.D.,
Director of Public Health

The status of Public Health in Illinois is good, comparatively speaking. It could be better — substantially better — potentially speaking. Prevailing health conditions within the State are better than they were ten years ago or twenty-five years ago. They are much better than they were fifty years ago or one hundred years ago. They compare favorably with health conditions in other States and in foreign countries. People in Illinois live considerably longer, on the average, than ever before and they suffer less from epidemic diseases.

On the other hand, much could be done which is not now being done to improve health conditions. This is especially true with respect to chronic diseases, mental illness, defective teeth and nutritional deficiencies. There now exists a considerable gap between the availability and the practical application of useful knowledge relating to health. The principal reason for this is a shortage of competent personnel on the one hand and a shortage of facilities such as

hospitals, laboratories and public health machinery on the other. The demand for health service is running ahead of machinery to provide it.

As to the organization and strength of public health agencies, the status in Illinois is good, comparatively speaking. Here again substantial improvement could be made, potentially speaking. Official public health agencies in Illinois, State and local, are stronger, more efficient, better staffed and carry on a more comprehensive program than ever before. They compare favorably with those in most other states. On the other hand, they fall far short of what ought to be in the light of potential achievement.

Let us examine as evidence of improvement in health conditions some of the changes which have taken place in Illinois. In 1921 diphtheria caused 1,474 deaths and 20,767 cases of illness and 1921 was not an unusual year at that time in that respect. In 1947 the same disease was responsible for 12 deaths and 173 cases of illness

and those figures were considered too high for these days. Likewise, typhoid fever caused 389 deaths and 2,419 cases of illness in 1921 against 9 deaths and 139 cases in 1947, which was a bad year in recent times. Smallpox caused 26 deaths and 8,536 cases of illness in 1921 against no deaths and 2 cases in 1947. Pneumonia was responsible for 5,040 deaths in 1921 against 3,035 in 1947. The figures for whooping cough were 506 deaths and 13,577 cases in 1921 against 41 deaths and 4,795 cases in 1947. To scarlet fever were attributed 390 deaths and 19,025 cases in 1921 against one death and 4,063 cases in 1947. Complications associated with pregnancy and childbirth were responsible for the loss of 923 mothers in 1921 against 200 in 1947, corresponding to a decline from 7 to 1 in the maternal death rate per 1,000 live births. Deaths among infants fell from 10,644 in 1921 to 5,541 in 1947, corresponding to a decline from 81 to 29 in infant death rate per 1,000 live births. Infantile diarrhea caused 3,100 deaths in 1921 against 158 in 1947. Tuberculosis accounted for 5,593 deaths in 1921 against 2,770 in 1947.

The remarkable improvement revealed by these data has been gradual, the experience in 1948 being better in respect to each item referred to above than in 1947. The human resources conserved through the cumulative result of this improvement would be difficult to calculate with accuracy. Tens of thousands of persons are alive and in good health today in Illinois who would long since have been dead if the conditions of 1921 had continued to prevail.

These gains, however, are by no means permanent, in the sense that they might perpetuate themselves. Indeed the gains could be lost quickly as was tragically demonstrated in Europe during the war. To retain the benefits already achieved and to effect further improvement the public health services must be maintained and strengthened and expanded.

We have glanced at the credit side of the ledger. What about the debit side? No gains at all have been made in the prevention of decay of the teeth. Indeed the prevalence of decay in the teeth of children is greater today than it was 25 years ago. No headway has been made in the prevention of mental illness. Some say that unhealthy conditions of the mind are on the

increase. Psychosomatic ailments are undoubtedly more prevalent than ailments of a purely physical origin. Chronic diseases such as cancer, arthritis, heart disease and nutritional deficiency have certainly not declined in prevalence. New risks such as the dangers from radio-active substances and from various chemicals used in manufacturing processes have come to light. Tuberculosis is only half conquered. Venereal diseases are still widespread. Poliomyelitis, influenza and undulant fever are diseases still to be reckoned with. These are among the challenges of the future to public health service. We have come a long way but we still have a long way to go before we attain the highest practicable level of public health. We are not yet out of the woods of communicable diseases but we are able to see the open fields ahead. We are still in the swamps and quagmire of chronic diseases and mental illnesses.

Now let us examine briefly some of the things that have been done and some of the things contemplated which account for the gains of the past and the hope of the future. In 1929, the last year of the post-World War I prosperity wave, the operating budget of the State Department of Public Health was approximately \$650,000 and the number of employees was 168. The operating budget of the Department for 1949 is nearly \$5,000,000 and the number of employees is 750. In 1929 there was no county health department in Illinois. Today 24 counties have taken advantage of a law passed in 1943 which authorizes the establishment of full-time county and multiple county health departments. As a result of that action there are now in operation one 4-county health department; four 2-county health departments; and 10 one-county health departments. In two counties, which voted favorably on the proposition only last fall, health departments have not yet been organized.

A number of cities also have full-time health departments so that approximately two-thirds of the population of the State is now covered by full-time local health departments. On the other hand, there are 78 counties in which health departments have not yet been authorized. In these 78 counties, public health service is limited for the most part to emergency problems such as the suppression of epidemic outbreaks or the threat thereof.

It is worthy of mention at this point that there is a distinct and growing trend toward cooperation between independent political units in matters of public health administration. As mentioned earlier, four counties, Massac, Pope, Johnson and Hardin, voted independently to establish a single health department which serves the four counties jointly. Alexander and Pulaski, Lawrence and Wabash and Piatt and DeWitt, respectively voted independently to establish health departments which in each case serve two counties jointly. Shelby and Effingham counties each voted to establish its own health department but the boards of health of the two counties have by agreement set up a department that for practical purposes serves both jointly.

The same trend prevails as to urban and rural political units. Although the law permits cities to operate independent health departments in counties which establish boards of health under the law, the cities of Bloomington and Normal voted at the outset to pool their services with the rural areas in the McClean County Health Department. Adams County and Quincy started out with independent health departments. Later the two were united by popular vote into one Department that serves the entire county. Will County started out with separate departments for Joliet and the remainder of the county. Now they have united so that one Department serves all of Will County.

Although well trained health officers, public health dentists, nurses and engineers are hard to get, owing to general shortages, the 15 local health departments organized under the county health department law are all well staffed at the moment, comparatively speaking. At the head of each is a qualified medical health officer. Most of them have a full staff of nurses. Some have dentists. Some have health educators. On the other hand, some of these departments are in serious need of additional medical strength, such as assistant health officers. There are opportunities also for dentists, psychiatric specialists and health educators.

Approximately \$25,000,000 is spent per year in Illinois by full-time official public health agencies for ordinary operational purposes. About \$3,000,000 of this is appropriated by the State and of this sum about \$500,000 goes to

full-time local health departments in the form of grants-in-aid. Likewise, about \$2,500,000 comes from the Federal government of which about \$500,000 goes to local health departments in the form of grants-in-aid.

About \$9,000,000 comes from local special tax levies for tuberculosis control and is spent by county and municipal sanitarium boards for the control of tuberculosis only. The remainder of the \$25,000,000, somewhat more than \$10,000,000, comes from local tax funds and is spent by local health departments.

At first blush \$25,000,000 seems like a sizable sum for public health purposes for Illinois. Actually it amounts to less than one penny per day per capita. That seems little enough for the benefits that accrue from the investment. Through the expenditure of these funds, health departments and tuberculosis boards in Illinois may fairly take credit for the prevention of at least 75,000 cases of communicable diseases and the saving of at least 18,000 lives from communicable diseases each year. Add to this the results of the potential productive efforts of those who are spared the disabling sickness from communicable diseases and the dividends on the investment become really attractive.

Aside from health departments, State and local hospitals have an important bearing on the status of public health. Once regarded as a place primarily and exclusively for the care and treatment of the sick, the hospital is rapidly becoming a community health center in the broadest meaning of that term. More and more the hospital is coming to be a place where both curative and preventive medicine is practiced and an educational and research center as well. Over 90 per cent of all births in Illinois occur in hospitals. Diagnostic laboratories and special diagnostic and teaching clinics are located in hospitals. Training facilities for physicians and schools for nurses are located in hospitals. These activities are growing in magnitude and importance so that the hospital is coming to be more and more the heart of the community program for the protection and improvement of health.

This expansion in the function of hospitals has resulted in a serious shortage of hospital facilities. To meet that need a nation-wide hospital construction program has been started.

The end in view is to provide adequate hospital facilities within reasonably easy reach of all people in the United States. To help in this program, the Federal government has agreed, through the passage of what is known as the Hill-Burton Hospital Construction Act, to appropriate \$75,000,000 per year for five years for distribution to the several states. Illinois is entitled to about \$2,770,000 per year. These funds became available for the fiscal year beginning July 1, 1947.

Federal assistance is available only to States which prepare a long-range hospital construction program based on a comprehensive survey of existing hospital facilities. One important feature of the long-range plan is a priority list, established on the basis of need. The Federal money, while it lasts, can be used to pay one-third of the costs of construction of any eligible public or non-profit hospital project.

Illinois is participating in this program and for a very good reason. The survey revealed that 28 counties had no hospitals at all and that 23 others had institutions which could be regarded as hospitals, in the modern sense, in name only. This situation led the General Assembly in 1947 to appropriate \$4,650,000 for hospital construction purposes. From this fund up to one-third of the cost of construction of any eligible hospital project can be paid.

This State appropriation made it possible to divide the cost of constructing a needed hospital equally between the local agency, the State and the Federal government. Each pays one-third.

An excellent beginning has been made in this program in Illinois. All of the available money has been obligated. Six general hospitals are actually under construction and plans are well advanced on eight others. These 14 projects together will cost approximately \$15,000,000 and will provide a combined total of some 900 beds.

They could not have been undertaken successfully without both Federal and State aid.

There remains an acute need for more than 11,000 more general hospital beds before facilities will be readily available to all people in Illinois. Continued progress toward meeting this need will depend largely on continued aid from both the State and Federal governments.

In addition to the hospital construction program which I have described, the State is also in process of building two tuberculosis sanatoriums, one at Mt. Vernon and one in Chicago. The one at Mt. Vernon, which will have 100 beds, is already under construction. For the one at Chicago which will have about 500 beds, the architectural plans have been completed. The completion of these two sanatoriums will be a long step-forward in the battle against tuberculosis.

These remarks give you a broad view of where we are in public health in Illinois today. I have not attempted to go into details as to the functions of health departments on the one hand nor as to problems on the other. Each step forward in the past has brought us only to higher ground from which we can see opportunities far greater than those behind. To take advantage of these opportunities we must have the machinery and the facilities with which to get things done. For that reason two major objectives of the State Department of Public Health are the promotion of the establishment of adequate full-time local health departments and the construction of hospitals sufficient to meet the needs of all the people.

The achievement of these two objectives would bring with it the nearest possible approach of making available to all of the people all of the advantages which scientific knowledge has to offer for the protection and improvement of health.

CORRESPONDENCE



ANESTHESIOLOGISTS' VIEWPOINT ON "CONFLICT"

March 14, 1949

To The Editor:—

"A Conflict in Anesthesiology", by J. G. (for the Medical Economics Committee), has aroused considerable interest among the members of the Illinois Society of Anesthesiologists. We can agree with many of the general conclusions reached, while claiming the privilege of disagreeing with some of the important details touched upon.

It seems odd that that particular committee should be the one to take this action, unless it be that hospital management has convinced many physicians that the problem is an economic rather than an educational one. Likewise, it is unfortunate that this official article quoted so freely from a paper by John M. Storm in the magazine "*Trustee, The Journal for Hospital Governing Boards*," since the article in that journal had a definite bias. As anesthesiology is set up in so many hospitals today, it is a revenue producer. It is understandable that some segments of hospital management are seeking to discredit physicians in the specialty of anesthesiology, for they mistakenly see them as a threat to hospital revenue, and not as the concern chiefly of the surgeon and the surgical patient.

We in Illinois have a sympathetic interest in the financial problems of the hospitals, and want to cooperate fully with their management in bringing about the necessary scientific and clinical progress in our specialty. It is not our purpose to upset the financial balance that has been laboriously built up over the years.

Actually, the greatest pressure for any sort of change has come indirectly from progressive surgeons and hospitals that are clamoring for the kind of anesthesia that only the physician with two or three years of specialty training can provide. We are doing our best to fill that need. Residency training is being given to about fifty young physicians in the Chicago area, in the city's outstanding hospitals. Approved residencies in anesthesiology in the whole country number 487. These will be over-filled when all medical schools expose their students to anesthesiology as something more than a technical field, and when those surgeons who want physician anesthesia encourage their students and younger colleagues to enter this specialty.

Those of us who are straining to fill the demand for anesthesiologists would find it exceedingly difficult to train anesthesia nurses also. Moreover, wherever such teaching of nurses and residents goes hand in hand, the quality of resident instruction tends to drop to the level of

what the nurse can absorb. This is probably the main reason why our national society has recommended that its members do not offer courses for anesthesia nurses. Nothing in the Society's actions can be construed as implying that we wish to legislate the nurse out of the field. Regardless of how individuals in the specialty may feel about the anesthesia nurse, we all know that she will be with us a long time, and that her final role will evolve gradually.

To the best of my knowledge, the American Board of Anesthesiology has taken no stand on the above or any relative matter. There is an implication in the second last paragraph of the editorial article that the Board might act in a "coercive fashion" in this regard. Such is not the case.

Moreover, we are not "declaring minor practitioners of anesthesia or nurse anesthetists as incompetent, and (we are not desirous of) eliminating them in one stroke." On the contrary, many physicians are training nurses for use in their own hospitals. Many others are teaching other physicians as part-time specialists, and we hope to extend this to many more who are in general practice. It is all too frequent that we hear it implied that the physician anesthetist must be a specialist of Board stature. That would be as ridiculous in anesthesiology as in any other specialty. In point of actual fact, there are certain non-anesthesiologist groups that would eliminate the minor practitioner of anesthesia, if that means the physician who does the occasional anesthetic for a colleague. These factions point to our inability to supply all surgical patients with specialist anesthesia as sufficient excuse for emphasizing more nurse training, instead of emphasizing training of the "occasional anesthetist." The latter plays a bigger role in "getting today's work done today" than would appear from tabulations of those who are available for administration of anesthetics. They do their occasional cases in locations where economic reasons would make it impossible to engage even the nurse specializing full-time in anesthesia. We need these doctors, and hope to help them do even better work.

Which brings up the major factual error in the Committee's article, the question of who does the nation's anesthesia. This too, seems to have

been abstracted, with modifications, from Mr. Storm's paper in the *Trustee*. The Committee's figures do not come close to the actual ones.

	Committee	
	Report	Actual
Anesthesiologists Certified by A.B.A.	400	463
Other physician Specialists	1000	1637
(about)	1400	2100

The figures in the second column do not include over 400 residents, and make no allowance for about 2000 physicians who have not actually joined the larger of our national societies, but who are carrying their share of the work as part-time specialists.

Secondly, the figures given suggest that 5,500 individuals are doing the anesthesia of 6,280 hospitals with surgical patients. Many of these hospitals have little or no surgery, so the discrepancy is not that great.

Thirdly, there are probably a great many anesthesia nurses who are not members of their national organization. This group is given no weight in arriving at the total available.

You will understand, too, our resentment at being singled out as a very young specialty, with the implication that we are pre-dated by anesthesia nurses, or that we date from the formation of our Board in 1938. There were outstanding physicians specializing in anesthesiology long before the turn of the century, at least to the extent that others were specializing in pediatrics, radiology or obstetrics. John Snow, the English physician, was a recognized anesthetist in 1847. Many of the Boards are of about the same degree of venerability (Internal Medicine, 1936; Surgery, 1937; Urology, 1934; etc.)

We can and do take the long view of the problems that confront us. We know that many more generations of medical students must have the opportunity of seeing, as has been stated, that anesthesiology is a much broader field than the nurse's education can support. Many more internes must have the opportunity of good anesthesiological experience under men who know the specialty in its scientific as well as its technical ramifications. Lastly, many more surgeons must see for themselves, as did hundreds of their colleagues in the armed services, what

progress has been made by individual members of our rapidly growing specialty in bringing to their patients the best that medicine has to offer.

Sincerely yours
W. Allen Conroy M.D.
President, Illinois
Society of Anesthesiologists

"YOUR MENTAL HOSPITALS" TUBERCULOSIS CONTROL IN STATE INSTITUTIONS

Tuberculosis is more prevalent among the mentally ill than in the general population. The problem reaches far beyond the walls of the institution due to frequent and close contact between the institutional patients, their families, the employees and the community. The fight against tuberculosis in the institutions of the Illinois Department of Public Welfare began years ago. A Tuberculosis Advisory Committee composed of specialists on the staffs of the mental hospitals, assisted by consultants, was appointed in 1940 in the Department. The Mobile Unit of the Illinois Department of Public Health has ably assisted in this work. At the present time tuberculosis control work is conducted in all Illinois State Institutions for the mentally ill and the mentally defective. The tuberculosis control program includes case finding, isolation and clinical workup of suspects and segregation and treatment of tuberculous patients.

Each new patient undergoes a physical and x-ray examination of the chest at the time of admission. Photo-fluorographic equipment is used for all chest surveys and additional radiological studies are made. A 4 by 7 inch stereoscopic film is made of the chest of each patient, and if this is suspicious of tuberculosis, a 14 by 17 inch film is taken. Surveys are conducted at least once a year and where personnel is available, twice a year. Patients afflicted with active tuberculosis are segregated in the Tuberculosis Units of the respective institutions. Patients with suspicious findings are observed and worked up for a final diagnosis. Modern diagnostic methods and laboratory examinations, including skin testing, sputum examinations, TB cultures, examinations of gastric washings, etc. are employed.

Despite the fact that emphasis is placed on the detection of early tuberculosis, any other thoracic pathology noted is carefully investigated. Patients with repeated "colds" or loss of weight are checked clinically and by x-ray examination. Treatment for tuberculous patients is initiated as the case warrants, and streptomycin is administered when clinically indicated.

In 1948, eighty thousand chest films were taken in the institutions of the Department of Public Welfare. The majority of cases found in recent surveys were in the minimal state. Out of a total of 44,000 patients there are 2,100 active cases on the Tuberculosis Units of the State Institutions, or 4.7 per cent. Twenty-two hundred arrested and healed cases reside on the other wards. Arrested or healed cases are thoroughly checked before they are transferred to a general ward and they are re-checked by clinical, x-ray and laboratory examinations at stated intervals.

The employees of all state institutions are included in the tuberculosis control program. A chest film is taken on every employee at the time of employment and at least once a year thereafter. Physicians, nurses, attendants and others employed on tuberculosis units are x-rayed every three months. Gowns, masks and caps are worn by employees of these units, and other public health measures are carried out.

Eight of the eleven institutions have modern x-ray equipments and the remaining three are now in the process of having such equipment installed. Provision was made by the last General Assembly for the construction of 312 tuberculosis beds, and it is hoped that the present session of the General Assembly will provide for additional construction of these much needed beds.

The State of Illinois ranks high in the care and treatment of the mentally ill patients afflicted with tuberculosis, despite the serious shortage of trained personnel.

G. A. Wiltrakis, M.D.
Deputy Director

CLINICS FOR CRIPPLED CHILDREN LISTED FOR MAY

The University of Illinois Division of Services for Crippled Children has scheduled 18 clinics to be held in the month of May. Dr. Herbert R. Kobes, director of the Division, stated

that 13 of these are to be general clinics where diagnostic, orthopedic, pediatric, speech and hearing examinations will be made; 4 are to be for children with rheumatic fever and 1 for cerebral palsied children.

The May schedule is as follows:

- May 3 — E. St. Louis, Christian Welfare Hospital
- May 4 — Joliet, Will Co. TB Sanitarium
- May 5 — Hinsdale, Hinsdale Sanitarium
- May 6 — Clinton, Y. M. C. A.
- May 10 — Peoria, St. Francis Hospital
- May 10 — Quincy, St. Mary's Hospital
- May 11 — Shawneetown, Burroughs - Stanelle Medical Center
- May 12 — Elmhurst Rheumatic Fever, Elmhurst Community Hospital
- May 12 — DuQuoin, Marshall-Browning Hospital
- May 13 — Chicago Heights Rheumatic Fever, St. James Hospital
- May 17 — Casey, Casey High School
- May 18 — Sterling, Sterling Public Hospital
- May 18 — Alton, Alton Memorial Hospital
- May 24 — Peoria, St. Francis Hospital
- May 24 — Effingham Rheumatic Fever, St. Anthony's Hospital
- May 25 — Springfield Cerebral Palsy, St. John's Hospital
- May 26 — Normal, Brokaw Hospital
- May 27 — Chicago Heights Rheumatic Fever, St. James Hospital

Over 7100 visits were made to the 145 general clinics held during 1948 and more than 10,000 individual examinations made.

During 1948, 2,225 children were placed on register of the Division.

Approximately 650 children received private physician's service through the Division and 2,100 visits were made outside of clinics, hospitals, and convalescent homes, during 1948.

These diagnostic clinics are conducted by the Division in cooperation with local medical and health organizations. The physicians who serve on the various clinics staffs are private physicians who are certified Board members. The follow up work on the children is based largely upon their recommendations for treatment and care. Private physicians may refer or bring children to a convenient clinic for examination or consultative service.

OBSTETRICS AND GYNECOLOGY EXAMINATIONS

The general oral and pathology examinations (Part II) for all candidates will be conducted at Chicago, Illinois, by the entire Board from Sunday, May 8, through Saturday, May 14 1949. The Hotel Shoreland in Chicago will be the headquarters for the Board. The Formal notice of the exact time of each candidate's examination will be sent him several weeks in advance of the examination dates. Hotel reservations may be made by writing direct to the Shoreland.

Candidates in military or Naval Service are requested to keep the Secretary's office informed of any change in address.

Applications are now being received for the 1950 examinations. Application forms and Bulletins are sent upon request made to American Board of Obstetrics and Gynecology, Inc., 1015 Highland Building, Pittsburgh 6, Pennsylvania.

PRIVATE LIBRARY DONATED TO CRERAR LIBRARY

Dr. Emil H. Grubbe, pioneer in x-ray therapy, has given his private library to The John Crerar Library, according to an announcement just issued by Herman H. Henkle, the Librarian. The gift makes important additions to the research collection of the Library in the fields of x-ray, x-ray therapy and related technical subjects. The collection given by Dr. Grubbe numbers about 1,000 volumes.

As an experimenter and manufacturer of x-ray apparatus, Dr. Grubbe first suffered x-ray burns more than 50 years ago. On January 27, 1896, he exhibited the detrimental effects produced by over-exposure to x-rays to a group of physicians in Chicago. Acting on the suggestion that the new x-rays might have value in the treatment of diseased tissues, Dr. Grubbe applied x-rays to a number of patients. These experiments marked the beginning of x-ray therapy.

Five early x-ray tubes used by Dr. Grubbe, original documents, letters, records and other evidence pertaining to Dr. Grubbe's claim to priority as the originator of x-ray therapy are

on deposit with the Smithsonian Institution of the United National Museum in Washington, D. C.

AMERICAN ASSOCIATION OF RAILWAY SURGEONS

The Sixty-First Annual Meeting of the American Association of Railway Surgeons will be held at the Drake Hotel, Chicago, Illinois, on Thursday, June 30, Friday, July 1, and Saturday morning, July 2, 1949.

An exceptionally interesting and instructive scientific program has been arranged, which will be given from 10:00 to 12:30 on each of the three mornings, and from 2:00 to 4:30 on the first two afternoons.

The morning sessions will include 12 papers on various medical and surgical subjects, given by outstanding authorities. The two afternoon sessions will be devoted to symposia on "Lesions of the Bones and Joints" and "Intra-thoracic Disorders."

The annual dinner will be held at the Drake Hotel on Friday evening, July 1, 1949.

Room reservations may be made at the Drake Hotel or at the nearby Knickerbocker Hotel.

There will be a technical exhibit in conjunction with the scientific meetings.

AMERICAN COLLEGE OF CHEST PHYSICIANS

The Board of Examiners of the American College of Chest Physicians announces that the next oral and written examinations for Fellowship will be held in Atlantic City, June 2, 1949. Candidates for Fellowship in the College, who would like to take the examinations, should contact the Executive Secretary, American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois.

The Fifteenth Annual Meeting of the American College of Chest Physicians will be held at the Ambassador Hotel, Atlantic City, June 2-5,

1949. An interesting scientific program has been arranged for this meeting, and speakers from several other countries are scheduled to appear.

Murray Kornfeld
Executive Secretary

FOOD AND DRUG ADMINISTRATION

The Federal Security Administration's Food and Drug Administration is making seizure of Syrup of Urethane. This is a cough syrup manufactured by Marvin R. Thompson, Inc., Stamford, Conn. Physicians, pharmacists, and consumers are warned that the administration of Urethane in the quantity recommended on the label may cause a dangerous lowering of the white blood count. This leaves the patient more liable to infection from disease germs. Individuals suffering from coughs are likely to have accompanying infections.

While urethane came into use as a sedative about a century ago, recent medical studies clearly demonstrate its potential danger when used as directed in the labeling of this syrup. However, when use of urethane is discontinued the white blood cell count ordinarily returns to normal in a short time.

More than 2300 gallons of Syrup of Urethane have been distributed in about 34,000 packages ranging in size from 1/2 oz. physician's samples to one gallon bottles. The product has gone throughout the country to physicians, wholesale druggists, and retail pharmacists.

When seizure actions were commenced the manufacturers started to recall Syrup of Urethane from the market. The manner and extent of distribution are such that neither the manufacturer nor federal, state, and local health offices will be able to locate all bottles promptly.

The American Medical Association and the American Pharmaceutical Association are assisting by distributing this warning through their mailing facilities to hospitals, state and county medical societies, and state pharmaceutical associations.

PROGRAM
OF THE
*One Hundred Ninth Annual Meeting
Illinois State Medical Society*



CHICAGO, ILLINOIS
PALMER HOUSE
MAY 16, 17, 18, 1949

Headquarters for Annual Meeting



The Palmer House

All scientific sessions, all scientific and technical exhibits and all social functions will be held in The Palmer House.

Program For The Annual Meeting

The official program in booklet form will be distributed to all registrants at the annual meeting. As you know, there is no charge for registration at any annual session of the Illinois State Medical Society.

ORATORS IN MEDICINE AND SURGERY

On Monday morning, May 16, in the Grand Ballroom, before the General Assembly, EDWARD L. TURNER, M. D., Dean, University of Washington School of Medicine, Seattle, will deliver the ORATION IN MEDICINE — "A Dean Looks at Medical Education and Practice". Dean Turner says: "This will give me an opportunity to discuss some of the pertinent problems of medical education in preparation for today's challenge in practice. Having had some experience in private practice as well as in medical administration, I am deeply interested in endeavoring to determine where real values in medical education lie in their relation to the things the clinicians must accomplish in practice".

On Wednesday afternoon, May 18, in the Grand Ballroom, NATHANIEL GRAHAM ALCOCK, M. D., President-Elect of the Iowa State Medical Society, Professor of Urology, University of Iowa College of Medicine, will deliver the ORATION IN SURGERY — "Tumors of the Kidney". Doctor Alcock will arrive at our meeting on Sunday, May 15, and be our guest throughout the session. As President-Elect of the Iowa Society, his interests and ours are the same in many fields, and he will be our guest at meetings of the House of Delegates and sessions of the Council.

OUT OF STATE SPEAKERS

Each of the sections has had the privilege of inviting an out of state guest speaker to appear. These

guests are scheduled before the General Assemblies, and in some cases, will also present a more highly technical paper before the individual section in that specialty.

On Monday, May 16, 1949

General Assembly:

JACOB ARNOLD BARGEN, Rochester, Minnesota, will present "Differential Diagnosis and Management of Amoebiasis".

NATHAN CHANDLER FOOT, New York, N. Y., will discuss "Limitations and Pitfalls of Cytologic Diagnosis from the Clinical Standpoint".

On Tuesday, May 17, 1949

General Assembly:

JOSEPH HARDY, St. Louis, Missouri, has as his title, "Functional Uterine Bleeding."

WILLIAM A. SODEMAN, of New Orleans, Louisiana, will on "How Does Malaria Interest the Practitioner in Illinois". He is Professor of Preventive Medicine at Tulane.

ROBERT ELMAN, St. Louis, Missouri, will speak on "Intestinal Obstruction in Infancy".

WENDELL SCOTT, St. Louis, Missouri, has as his title "Significance of Rectal Bleeding and the Importance of Diagnosing Early Carcinoma of the Colon".

RALPH O. RYCHENER, Memphis, Tennessee, the guest speaker for the Section on Eye, Ear, Nose and Throat, will discuss "Retro-lental Fibroplasia".

On Wednesday, May 18, 1949

General Assembly:

HARRIS B. SHUMACKER, Jr., Indianapolis, Indiana, will present a paper on "Treatment of Peripheral Vascular Disorders".

Scientific Programs

General Assembly

Grand Ballroom

MONDAY MORNING, MAY 16, 1949

Presiding: Eugene T. McEnery, Chicago

Assisting: George Milles, Chicago

9:30 — Opening of the 1949 Annual Meeting

9:40 — "Diagnosis and Treatment of Parathyroid Disease" — ROBERT M. HOYNE, Urbana

10:10 — PRESIDENT'S ADDRESS — PERCY E. HOPKINS, Chicago

10:30 — RECESS

11:00 — "Bulbar Poliomyelitis: A Problem in Respiratory Obstruction" — THOMAS C. GALLOWAY, Evanston

11:20 — THE ORATION IN MEDICINE — "A Dean Looks at Medical Education and Practice" — EDWARD L. TURNER, Seattle, Wash.

MONDAY AFTERNOON, MAY 16, 1949

Presiding: W. C. Scrivner, East St. Louis

Assisting: Richard C. Gamble, Chicago

1:30 — "Diaphragmatic Hernia Associated with Severe Anaemia" — STEVEN O. SCHWARTZ, Chicago

1:50 — "Management of Abortions" — ARMAND JEAN MAUZEY, Chicago

2:10 — "Protein Requirements" — PAUL R. CANNON, Chicago

2:30 — "Amoebiasis (Amoebic Colitis): Its Present Day Management" — J. ARNOLD BARGEN, Rochester, Minnesota

3:00 — RECESS

3:30 — "Limitations and Pitfalls of Cytologic Diagnosis from the Clinical Standpoint" — NATHAN CHANDLER FOOT, New York, N. Y.

4:00 — "Fractures of the Ankle" — CARLO S. SCUDERI, Chicago

4:20 — "The Cross-eyed Child" — WATSON GAILEY and Frederick Crowley, Bloomington

4:40 — "X-Ray Aspects of Lesions of the Oesophago-Gastric Junction" — JOSEPH G. LITSCHGI, Chicago

TUESDAY MORNING, MAY 17, 1949

Presiding: J. C. Redington, Galesburg

Assisting: John R. Wolf, Chicago

9:00 — "Penicillin and Pediatrics" — BENJAMIN M. KAGAN, Chicago

- 9:20 — "Differential Diagnosis of Brucellosis" — NOR-MAL B. McCULLOUGH, Chicago
 9:40 — "Functional Uterine Bleeding" — JOSEPH HARDY, St. Louis, Missouri
 10:10 — RECESS
 10:40 — "Immunization in Early Childhood" — LOUIS W. SAUER, Evanston
 11:00 — "Early Diagnosis of Carcinoma of the Uterus" — FREDERICK H. FALLS, Oak Park
 11:20 — "How Does Malaria Interest the Practitioner in Illinois" — WILLIAM A. SODEMAN, New Orleans, Louisiana.

TUESDAY AFTERNOON, MAY 17, 1949

- Presiding: John H. Gilmore, Chicago
 Assisting: James P. Simonds, Chicago
 1:30 — "Intestinal Obstruction in Infancy" — ROBERT ELMAN, St. Louis, Missouri
 2:00 — "Tumors of the Thyroid" — Everett P. Coleman, and David A. Bennett, Canton
 2:20 — "Significance of Rectal Bleeding and the Importance of Diagnosing Early Carcinoma of the Colon" — WENDELL SCOTT, St. Louis, Missouri
 2:50 — RECESS
 3:30 — "Retro-lental Fibroplasia" — RALPH O. RYCHENER, Memphis, Tennessee
 4:00 — "Prevention of Toxemias of Pregnancy" — HOWARD L. PENNING, Springfield
 4:20 — "Intra-Thoracic Tumors" — RALPH BETTMAN, Chicago

WEDNESDAY MORNING, MAY 18, 1949

- Presiding: John L. Keeley, Chicago
 Assisting: George L. Drennan, Jacksonville
 9:00 — "Care of the Patient in Postoperative Period" — MAX A. SADOVE, Chicago

- 9:20 — "Streptomycin in Treatment of Tuberculosis in Children" — EUGENE T. McENERY, Chicago
 9:40 — "Treatment of Peripheral Vascular Disorders" — HARRIS B. SHUMACKER, Jr., Indianapolis, Indiana
 10:10 — RECESS
 10:40 — "X-Ray Aspects of Carcinoma of the Lung" — CESARE GIANTURCO, Urbana
 11:00 — "Masses in the Breast" — HARRY A. OBERHELMAN, Chicago
 11:20 — "Differential Diagnosis and Management of Jaundice" — ANDREW C. IVY, Chicago

WEDNESDAY AFTERNOON, MAY 18, 1949

- Presiding: David B. Freeman, Moline
 Assisting: John B. Hall, Jr., Chicago
 1:30 — "Management of Foreign Bodies in the Stomach" — ALBERT H. ANDREWS, Chicago
 1:50 — Title to be announced — RICHARD F. HERN-DON, Springfield
 2:10 — "X-Ray Manifestations of Adolescent Osteo-chondritis of the Spine in Adults" — ROBERT M. POTTER, Chicago
 2:30 — ORATION IN SURGERY — "Tumors of the Kid-ney" — NATHANIEL G. ALCOCK, Iowa City, Iowa
 3:15 — RECESS
 3:45 — "Pathology of Trauma" — JERRY J. KEARNS, Chicago
 4:05 — "Caustic Strictures of the Oesophagus. Their Immediate Management and Long Term Ther-apy" — PAUL H. HOLINGER, Chicago
 4:25 — "Sarcoidosis: A Common Disease" — WALTER H. NADLER, Chicago

A Day by Day Summary

SUNDAY, MAY 15, 1949

- 10:00 a. m. Central States Society of Industrial Med-icine and Surgery
 2:00 p. m. Illinois Chapter — American College of Chest Physicians

MONDAY, MAY 16, 1949

- 9:30 a. m. GENERAL ASSEMBLY, in the Grand Ball-room

LUNCHEONS:

Diplomates, National Board of Medical Examiners, Private Dining Room 6, Dr. Willard O. Thompson
 Maternal Welfare Committee, Dr. Frederick H. Falls, Chairman, P. D. R. No. 9
 Medical Economics Committee, Dr. Chauncey C. Maher, Chairman, P. D. R. No. 3
 Phi Chi Alumni Luncheon, Dr. Arkell M. Vaughn, Private Dining Room No. 8

- 1:30 p. m. GENERAL ASSEMBLY, in the Grand Ball-room

- 3:00 p. m. First Meeting of the HOUSE OF DEL-EGATES in Private Dining room No. 14. Club Floor

EVENING MEETINGS:

Secretaries' Conference — Dinner meeting, Pri-vate Dining Room 17
 Committee on Military Affairs — Dinner meeting, Private Dining Room 18

- 9:00 p. m. FELLOWSHIP HOUR in Foyer of the Grand Ballroom. Everyone invited for "beer and pretzel" session.

TUESDAY, MAY 17, 1949

- 8:00 a. m. Women Physicians' Breakfast in Private Dining Room No. 9

- 9:00 a. m. GENERAL ASSEMBLY, in the Grand Ball-room

- 9:00 a. m. Section on Eye, Ear, Nose and Throat in the Crystal Room

- 9:00 a. m. Section on Pediatrics in Private Dining Room No. 17

- 9:00 a. m. Section on Pathology in Private Dining Room No. 8

LUNCHEONS:

Section on Pathology in Private Dining Room No. 4

University of Illinois Alumni Luncheon in Private Dining Room 14

- 1:30 p. m. GENERAL ASSEMBLY, in the Grand Ball-room

- 6:00 p. m. Cocktail Party — Section on Radiology

- 7:00 p. m. ANNUAL DINNER IN THE GRAND BALL-ROOM, honoring the President, Dr. Percy E. Hop-kins of Chicago

WEDNESDAY, MAY 18, 1949

- 9:00 a. m. GENERAL ASSEMBLY, in the Grand Ball-room

- 9:00 a. m. Second Meeting of the HOUSE OF DEL-EGATES in Private Dining Room 14 Club Floor

LUNCHEONS:

Fifty Year Club Luncheon, Dr. Andy Hall, Chair-man, Crystal Room

Loyola University Alumni, Private Dining Room 17

Section on Public Health and Hygiene luncheon, Private Dining Room No. 18

- 1:30 p. m. GENERAL ASSEMBLY in the Grand Ball-room

THURSDAY, MAY 19, 1949

The Physicians' Association, Department of Public Welfare

Meetings of the Various Sections

Section on Eye, Ear, Nose and Throat

Perry E. Duncan, Chairman Springfield
Richard C. Gamble, Secretary Chicago

TUESDAY MORNING, MAY 17, 1949

The Crystal Room

9:00 a. m.

"Goniotomy" — Otto F. Seidelmann, Chicago
"The Correction of Congenitally Protruding Ears"
— Oscar Becker, Chicago
"Mucocele of Nasolacrimal Duct" — Robert Flatley,
Moline
"The Treatment of Glaucoma with Sympatholytic
Compounds" — Frank Newell, Chicago
"The Surgical Management of Advanced Carcino-
ma of the Larynx and Pharynx" — M. F. Snitman,
Chicago
"The Surgical Treatment of Congenital and Adult
Dacryocystitis" — RALPH RYCHENER, Memphis, Ten-
nessee
"The Accommodative Factor in the Squint Problem"
— Beulah Cushman
"Effect of Antibiotics in Osteomyelitis of the Skull,
Robert Henner and Merton B. Skinner, Chicago

Section on Pediatrics

Eugene T. McEnery, Chairman Chicago
George L. Drennan, Secretary Jacksonville

TUESDAY MORNING, MAY 17, 1949

Private Dining Room 17

9:00 a. m.

"Methemoglobinemia in Infants" — A. R. Eveloff,
Springfield
"Treatment of Congenital Syphilis with Penicil-
lin" — Noel G. Shaw, Evanston
"The Prevention of Respiratory Infections in Chil-
dren" — J. Keller Mack, Springfield
"Tetanus of the Newborn" — Howard R. Miller,
Peoria

Section on Pathology

M. C. Corrigan, Chairman Chicago
George Milles, Secretary Chicago

TUESDAY MORNING, MAY 17, 1949

Private Dining Room 8

9:00 a. m.

"The Lumpy Breast" — Patrick T. Dolan, Depart-
ment of Pathology, University of Chicago, Chicago

"The Pathologic Effects of Folic Acid Antagonists
Used in the Treatment of Cancer" — George M. Hass,
Department of Pathology, The Presbyterian Hospital,
Chicago

"Limitations and Pitfalls of Cytologic Diagnosis
from the Pathological Standpoint", N. CHANDLER
FOOT, Cornell University Medical College, New York

"The Practical Aspects in the Diagnosis of Virus
Infections by Current Laboratory Techniques" —
Richard A. Morrissey, Bacteriologist in Charge, Virus
Laboratory, Department of Public Health

Following the scientific session, this Section will
have a luncheon served in Private Dining Room
No. 4.

Section on Radiology

John H. Gilmore, Chairman Chicago
Harold L. Shinall, Secretary Bloomington

TUESDAY AFTERNOON, MAY 17, 1949

Private Dining Room 9

3:30 p. m.

The Section on Radiology plans to have a Film
Reading Session the latter part of the afternoon, at
which the out of state guest speaker, Dr. Wendell
Scott of the Washington University School of Med-
icine, St. Louis, will act as moderator.

Following the Film Reading Session, the Section
will have a cocktail party in private dining room 8
before the Annual Dinner that evening.

Section on Public Health and Hygiene

Jerome J. Sievers, Chairman Springfield
John B. Hall, Jr., Secretary Chicago

WEDNESDAY NOON, MAY 18, 1949

Private Dining Room 18.

The Section on Public Health and Hygiene will
have a luncheon meeting for the election of Section
officers and the transaction of whatever business
arises for consideration, on Wednesday noon, May
18, 1949.

Arrangements will be made with the Hotel for
luncheon reservations for 30 — 35 physicians. Tick-
ets will be on sale at the Registration Desk during
the meeting.

Special Society Functions

House of Delegates

Private Dining Room 14

Club Floor

MONDAY AFTERNOON, MAY 16, 1949

3:00 p. m. The first meeting of the House of Del-
egates will be called to order by the President,
Percy E. Hopkins, Chicago, for Reports of Officers,
Councilors, Committees, Appointment of Reference
Committees, Introduction of Resolutions, and for the

transaction of other business which may come before
the House.

WEDNESDAY MORNING, MAY 18, 1949

9:00 a. m. The second meeting of the House of
Delegates will be called to order by the President,
Percy E. Hopkins, Chicago, for the Election of
Officers, Councilors, Committees, Delegates and Al-
ternates to the American Medical Association, Re-
ports of Reference Committees and action on same,
action on Resolutions, and for the transaction of
other business to come before the House. Just before

**SECRETARIES' CONFERENCE
ILLINOIS STATE MEDICAL SOCIETY'S "GRASS
ROOTS" CONFERENCE**

**All physicians invited to attend
MONDAY EVENING, MAY 16, 1949**

Private Dining Room 17

6:00 p. m. The program for the Monday evening dinner meeting, to which all physicians in attendance at the meeting are cordially invited, is being outlined by the officers of the "Secretaries' Conference". Dr. H. Kenneth Scatliff, Secretary, is responsible for the program, and has the following timely subjects for the meeting.

"What the A. M. A. is Doing" — Clem Whitaker, or an associate from the firm, Whitaker and Baxter.

"Panel Discussion on Compulsory Sickness Insurance" Percy E. Hopkins, Harry M. Hedge, and Mr. John W. Neal.

Special notices will be sent to all county society officers and they will be urged to attend this meeting.

SECRETARIES' CONFERENCE

M. D. Murfin, Chairman Decatur
Walter C. Bornemeier, Vice-Chairman Chicago
H. Kenneth Scatliff, Secretary Chicago

COMMITTEE ON MILITARY AFFAIRS

Private Dining Room 18

MONDAY EVENING, MAY 16, 1949 — 6:00 P. M.

The Committee on Military Affairs and Emergency Medical Service of the Illinois State Medical Society plans an outstanding evening program with a speaker of national reputation.

The subject chosen for the evening is

DISASTER MEDICINE

Committee representatives have been appointed in each county society throughout Illinois, and it is the sincere hope of the Committee that every county and branch society in the state will be represented at this session.

COMMITTEE ON MILITARY AFFAIRS AND EMERGENCY MEDICAL SERVICE

Earl H. Blair, Chairman Chicago
F. T. Brenner, Jr., Quincy
Pliny R. Blodgett, Chicago Heights
Philip Lewin, Chicago
Gilbert Edwards, Pinckneyville
Kenneth H. Schnepf, Springfield
Leo P. A. Sweeney, Chicago

Annual Fellowship Hour

Foyer of the Grand Ballroom

MONDAY EVENING, MAY 16, 1949

9:00 p. m. Under the auspices of the Reception Committee, the Illinois State Medical Society will act as host to the physicians and their wives in attendance at the 1949 annual meeting. A beer and pretzel party is scheduled for the Foyer of the Grand Ballroom on Monday evening, May 16. Rumors are out at this time that strolling players, barber shop quartets, etc., are being considered for the evening entertainment.

The technical exhibitors at the annual meeting will be invited to join the physicians at this get-together, and Dr. Harold C. Voris, Chairman of the Technical Exhibits Committee, will be delegated the responsibility of extending the invitation of the Society to the commercial houses that join us in 1949 in making

our meeting an outstanding and successful one. This will give the physicians and the men who call upon them during the year, an opportunity to get together informally for a social evening.

THE RECEPTION COMMITTEE

Albert Mickow, Chairman
Alfred F. Gareiss, Vice-Chairman
Harry A. Oberhelman
Warren W. Young
Edward A. Skolnik
E. F. Carey
Charles E. Pope
Allen Hoover
Wright Adams
William S. Bougher
John L. Reichert
Paul H. Holinger
Stanley F. Przygocki
Elmer V. McCarthy
Charles P. Eck
T. H. Kelly
Edwin J. Lukaszewski
John T. Gregorio

**WOMEN PHYSICIANS' BREAKFAST
TUESDAY MORNING, MAY 17, 1949**

Private Dining Room 9

8:00 a. m. On Tuesday morning at 8:00 o'clock the women physicians registered at the 1949 annual meeting will be the guests of the State Society at a breakfast meeting.

Dr. Katherine W. Wright, 25 E. Washington Street, Chicago, is the Chairman of the Committee in charge of the meeting this year, and the members of her committee are, Dr. Eloise Parsons, Dr. Katherine Mayer, Dr. Helen Button, Dr. Johanna Heumann, Dr. Beulah Wallin and Dr. Evangeline Stenhouse.

The program will be announced later. Tickets for those who desire to attend will be available at the Registration Desk.

ANNUAL DINNER HONORING THE PRESIDENT

**Percy E. Hopkins, Chicago
GRAND BALLROOM**

On Tuesday evening, May 17, the annual dinner of the Illinois State Medical Society will be held in the Grand Ballroom of the Palmer House to honor the retiring president, Dr. Percy E. Hopkins of Chicago.

The speaker this year will be William Alen Richardson, Editor, Medical Economics since 1934. His talk will be "Britain's Medical Experiment: One Year Later". The first part of March, Mr. Richardson left to spend two months in England; he will return the latter part of April, and one of his first speaking engagements will be our annual dinner.

The annual dinner this year will be "streamlined" and the only afterdinner talk will be made by Mr. Richardson.

The complete program will be published in the official handbook and on the souvenir placecards for the dinner.

ANNUAL DINNER COMMITTEE:

Leo P. A. Sweeney, Chairman
Frank Fowler, Vice-Chairman
Willard O. Thompson
Myron Hipskind
Allison L. Burdick
G. Henry Mundt
Paul Lawler
Harry Dooley
Robert R. Mustell
G. E. Johnson
J. B. Karr
A. J. Linowiecki

**FIFTY YEAR CLUB LUNCHEON
WEDNESDAY NOON, MAY 18, 1949**

Crystal Room

All members of the Fifty Year Club will receive invitations from the Chairman of the Fifty Year Club Committee, Dr. Andy Hall of Mt. Vernon, inviting them to be the guests of the Illinois State Medical Society at the annual luncheon of the Club.

The luncheon will be served in the Crystal Room on the third floor of the Palmer House on Wednesday noon, May 18. Tickets for all members of the Fifty Year Club will be available for all attending the luncheon.

WOMAN'S AUXILIARY

To The

**ILLINOIS STATE MEDICAL SOCIETY
CONVENTION PROGRAM**

The twenty-first annual meeting of the Woman's Auxiliary to the Illinois State Medical Society will be held in Chicago at the LaSalle Hotel on May 16, 17, 1949.

A cordial invitation is extended to wives of all members of the Illinois State Medical Society to at-

tend the sessions and the social functions.

PRELIMINARY PROGRAM

MONDAY, MAY 16, LaSalle Hotel

9:00 a. m. — Registration — Mezzanine Floor

9:30 a. m. — Pre-Convention Board Meeting — Parlor F

1:30 p. m. — Opening General Session — Chicago Room

6:00 p. m. — Reception — Illinois Room

7:00 p. m. — Dinner — Illinois Room

Greetings — Dr. Walter Stevenson, President-Elect, Illinois State Medical Society

TUESDAY, MAY 17, LaSalle Hotel

9:00 a. m. — Registration — Mezzanine Floor

9:30 a. m. — General Session — Chicago Room

12:30 p. m. — President's Luncheon — Illinois Room
Guest Speaker — Mr. Lawrence Rember, Executive Assistant, Public Relations, American Medical Association

3:00 p. m. — Post-Convention Board Meeting — Parlor F.

Please make reservations at the LaSalle Hotel, Chicago, as early as possible. Kindly mention the Auxiliary when writing the hotel.

Meetings of Special Groups

ANNUAL MEETING

**CENTRAL STATE SOCIETY OF INDUSTRIAL MEDICINE AND SURGERY
THE PALMER HOUSE**

SUNDAY, MAY 15, 1949

BUSINESS MEETING — ELECTION OF OFFICERS

10:00 a. m.

SCIENTIFIC SESSION

"Taking the Brrr Out of Beryllium" — Herbert T. Walworth, Director, Industrial Hygiene Division, Lumbermens Mutual Casualty Company

10:30 a. m.

"Ruptured Intervertebral Discs" — Fremont A. Chandler, Professor of Orthopedic Surgery and Director of the Department of Orthopedic Surgery, University of Illinois College of Medicine

11:00 a. m.

"The Role of Chemotherapy and Antibiotics in the Prevention and Treatment of Surgical Infections" — John T. Reynolds, Department of Surgery, University of Illinois College of Medicine

11:30 a. m.

FELLOWSHIP LUNCHEON

An opportunity to meet the speakers of the day informally.

12:30 p. m.

PANEL DISCUSSION OF MEDICAL ECONOMICS

Moderator — D. Oris Conley, President, Central State Society of Industrial Medicine and Surgery

"The Point of View of Organized Labor" — Speaker

to be announced

2:00 p. m.

"The Point of View of the Employer" — Speaker to be announced

2:25 p. m.

"The Point of View of Organized Medicine" — Thomas V. McDavitt, Director of Personnel Relations, American Medical Association

2:50 p. m.

"The Point of View of the Industrial Physician" — Joseph H. Chivers, Chairman, Committee on Industrial Health, Illinois State Medical Society

3:15 p. m.

The Chicago Society of Industrial Medicine and Surgery will join in this meeting. The medical profession at large and any other interested citizen are cordially invited to attend these sessions

THE ILLINOIS CHAPTER

AMERICAN COLLEGE OF CHEST PHYSICIANS

SUNDAY AFTERNOON, MAY 15, 1949

The Palmer House

All physicians attending the annual meeting of the Illinois State Medical Society are invited to hear an outstanding scientific program arranged by the Program Committee of the Illinois Chapter of the American College of Chest Physicians. The Committee in charge of the meeting is composed of

O. L. Bettag, Chairman, Pontiac
Edwin R. Levine, Chicago
George H. Vernon, Springfield

2:00 p. m.

"Decortication of the Lung in Treatment of Empyema" — Thomas H. Burford, Associate Professor of Surgery, Washington University School of Medicine, St. Louis, Missouri

"Diseases of the Lung of Vascular Origin" — Leo G. Rigler, Professor of Radiology Minnesota University School of Medicine, Minneapolis.

"Pulmonary Manifestations of Sarcoidosis" — A. L. Banyai, Associate Clinical Professor of Medicine, Marquette University School of Medicine, Milwaukee, Wisconsin

"Diagnosis and Treatment of Chronic Suppurating Pneumonitis" — W. M. Tuttle, Associate Professor of Surgery, Wayne University College of Medicine, Detroit, Michigan

"Cavernostomy" — J. V. Thompson, Associate in Surgery, Indianapolis City Hospital, Indianapolis, Indiana

DIPLOMATES OF THE NATIONAL BOARD OF MEDICAL EXAMINERS

MONDAY NOON, MAY 16, 1949

Private Dining Room 6

There will be a luncheon of the Illinois Diplomates of the National Board of Medical Examiners on Monday, May 16, at 12:30 p. m. in private dining room No. 6 on the third floor of the Palmer House.

All Diplomates are urged to attend. There will be a discussion of recent developments in the National Board of Medical Examiners and their plans for the future.

Tickets can be secured from Dr. Willard O. Thompson, 700 North Michigan Avenue, Chicago, and the luncheon will be \$4.00.

PHI CHI ALUMNI LUNCHEON

MONDAY NOON, MAY 16, 1949

Private Dining Room 8

At this time we are making plans for the Phi Chi Alumni group to have a luncheon meeting Monday noon, May 16, in Private Dining Room 8.

Dr. Arkell M. Vaughn, 30 North Michigan Avenue, Chicago 2, has tentatively agreed to contact alumni, and to be in charge of the meeting.

Luncheon tickets will be on sale the day the meeting opens, and reservations should be made in advance.

UNIVERSITY OF ILLINOIS ALUMNI LUNCHEON

TUESDAY NOON, MAY 17, 1949

Private Dining Room 14

The Medical Alumni Association of the University of Illinois College of Medicine will hold its annual luncheon at 12:00 o'clock Tuesday noon, May 17, at the Palmer House. Class reunions are planned, and the election of officers will be held.

Dr. Michael H. Streicher, 30 North Michigan Ave., Chicago 2, is making the necessary arrangements.

LOYOLA UNIVERSITY ALUMNI ASSOCIATION LUNCHEON

WEDNESDAY NOON, MAY 18, 1949

Private Dining Room 17

The alumni of the Stritch School of Medicine of Loyola University will have their annual luncheon reunion during the Illinois State Medical Society meeting at the Palmer House on Wednesday, May 18. The affair will begin at 12 noon.

This luncheon, which has come to be a traditional feature, both of Loyola men and women and of the Illinois State Medical Society meeting, will feature the annual election of officers and a brief address by President Hussey of the University.

On hand for the affair will be Dean James J. Smith, M. D., Rev. Michael I. English, S. J., regent of the School of Medicine, various prominent faculty members, headed by Dr. Thesle T. Job and Rev. G. G. Grant, S. J., executive secretary of the Alumni Association.

Arrangements are being handled by Miss Ann Penrice of the Alumni Office, 820 North Michigan Ave., Chicago, phone DElaware 7-1078. Dr. John Keeley of Chicago is the current president of the Association. Luncheon tickets will be \$3.50.

PHYSICIANS' ASSOCIATION, DEPARTMENT OF PUBLIC WELFARE State of Illinois

THURSDAY, MAY 19, 1949

According to present plans, the Physicians' Association of the Department of Public Welfare of the State of Illinois will plan to have a meeting and scientific program of their group on Thursday, May 19, 1949, just following the annual session of the State Society.

Final program arrangements have not been made as yet, but the Association plans to send in the material so that this session can be printed in the official program of the Society.

Scientific Movies

Rooms 15-16 — Club Floor

Under the direction of **Coye C. Mason, Chairman**

9:00 a. m. — "Management of the Failing Heart"
Department of Pharmacology, Cornell University
Medical School New York, New York. Time:
40 minutes.

9:45 a. m. — "Kidney Function in Health." Arthur C.
Corcoran, Don Carlos Hines, Irving H. Page,
Indianapolis, Indiana. Time: 38 minutes.

10:30 a. m. — "Physiology of Normal Menstruation".
Somers Sturgis, John Rock, Bloomfield, New
Jersey. Time: 23 minutes.

10:55 a. m. — "Cancer: The Problem of Early Diagno-
sis". American Cancer Society — Illinois Divi-
sion. Time: 30 minutes.

11:30 a. m. — "Introduction to Fractures". American
College of Surgeons. Time: 25 minutes.

INTERMISSION

1:15 p. m. — "Proctoscopic Color Movies". J. M.

Garner, J. P. Nesselrod, Northwestern University
Medical School and Evanston Hospital. Time:
20 minutes.

1:38 p. m. — "Examination of the Breast for Early
Cancer". American Medical Association. Time:
20 minutes.

2:00 p. m. — "Cesarean Section — Norton Paravesi-
cal Extraperitoneal Technic". Milton McCall, De-
partment of Obstetrics and Gynecology, Jefferson
Medical School, Philadelphia, Pennsylvania.
Time: 15 minutes.

2:17 p. m. — "Supra-aortic Esophagogastronomy for
Carcinoma of the Midportion of the Esophagus".
Philip Thorek, University of Illinois College of
Medicine, Chicago. Time: 40 minutes.

3:00 p. m. — "Total Colectomy with Ileoproctostomy
for Megacolon, (Hirschsprung's Disease). Philip
Thorek, University of Illinois College of Medicine,
Chicago. Time: 28 minutes.

3:30 p. m. — "Craniotomy". Harold C. Voris, Stritch
Medical School, Loyola University, Chicago.
Time: 50 minutes.

4:20 p. m. — "Gel-foam in Surgery." H. F. Hailman,
Kalamazoo, Michigan. Time: 25 minutes.

Scientific Exhibits

Red Lacquer Room

Coye C. Mason, Chairman and Director Chicago
Hilger Perry Jenkins, Chicago
Hugh A. Flack, Chicago
Arkell M. Vaughn, Chicago
Lawrence W. Peterson, Chicago

Title: "Diaphragmatic Hernia"

Exhibitor: Ralph B. Bettman, W. J. Tannenbaum,
L. H. Rubenstein, Michael Reese Hospital, Chi-
cago

Models showing most of the common types of
diaphragmatic hernia with case histories and
x-rays of actual cases typical of each type.

Charts show the embryology of the diaphragm,
usual symptoms, differential diagnosis and types
of treatment.

Title: "Tumors of the Thyroid"

Exhibitor: David A. Bennett, Everett P. Coleman,
Coleman Clinic, Canton

Photographs and colored slides of true tumors
of the Thyroid Gland. There will be microscopes
available in the booth for tissue examination of
various tumors of the Thyroid Gland.

Title: "Lesions of the Vertebrae"

Exhibitor: S. A. Leader, Hines Hospital and the Uni-
versity of Illinois College of Medicine.

Transparencies illustrating lesions of the spine

such as Myeloma, metastatic carcinoma, Paget's
Disease, Ewing's Tumor, Hodgkin's Disease.
There are brief abstracts of pertinent history in-
cluding biopsy or autopsy. Where lesions in
other parts of the body are demonstrated on
x-ray, these are shown.

Title: "Superficial Fungus Infections — Methods of
Diagnosis"

Exhibitor: David M. Cohen, Milton Goldin, Chicago
Medical School and Mt. Sinai Hospital

The exhibit will consist of charts, photographs
and laboratory apparatus. It will emphasize
cases which clinically suggest the possibility
of a fungus infection and the steps to be taken to
make an accurate diagnosis as to the genera
and species. Most of this can be an office pro-
cedure. Although treatment on clinical suspi-
cion may at times be necessary, a confirmed diag-
nosis is advisable. Since fungus diseases are so
prevalent, we believe that this subject deserves
the attention of all physicians.

Title: "Extragenital Syphilitic Chancre"

Exhibitor: Louis E. Tavs, Frederick J. Szymanski,
Department of Dermatology, University of Illinois
College of Medicine.

A pictorial demonstration of extragenital syphili-
tic chancres at varied sites are presented, using
colored and black and white enlarged trans-
parencies, and charts depicting incidence of
occurrence in various locations of the body. A
survey of the diagnostic technics applicable in

the diagnosis of this lesion are shown. The latter includes photomicrographic enlargements of the biopsy features of the chancre. There is also a photographic display of the technics of direct darkfield and lymphnode puncture dark-field procedure. Comments on serologic reactions for syphilis as found in these lesions are made.

Title: "Anal Ducts and Glands — Their Relation to Anal Infection"

Exhibitor: J. Peerman Nesselrod, Barry J. Anson, Sherman Coleman, Northwestern University Medical School

A reconstruction of anal ducts and glands in the adult human is shown, together with enlarged photomicrographs and charts illustrating the role of these structures in the pathogenesis of common anal-rectal inflammatory disorders such as hemorrhoids, anal fissure, anal abscess and anal fistula.

Title: "Talcum Powder Hazard in Surgery" (Suggested corrective measure)

Exhibitor: James Graham, Arthur Lindsay, James Cunningham, Springfield Clinic, Springfield

The hazard of talc as a dusting powder for gloves arises from the proliferative foreign body reaction to the constituent Magnesium Silicate crystals. Adhesions and granulomas result. Autopsy specimens of these lesions produced in mice and rats are demonstrated under the polarizing microscope. Transparent enlarged microphotographs illustrate talc crystals in granulomas with and without polarized light. An amylose-amylopectin compound is used as a substitute for the talc

Title: "The Physician's Creed — Religio Medici"

Exhibitor: Samuel J. Zakon Northwestern University Medical School

The Creed and Philosophy of Medicine and Physicians as exemplified by the teachings of Hippocrates, Maimonides, Sir Thomas Browne, Pasteur, Pavlov, Osler and others, will be shown. This will be done with charts, quotations, photos and books.

Title: "Indications for Surgery in Carcinoma of the Breast"

Exhibitor: Louis P. River, Joseph Silverstein, Breast Tumor Clinic, Cook County Hospital, The Hektoen Institute for Clinical Research, Stritch Medical College of Loyola University

Charts as follows: (1) List of absolute and relative contra-indications to extensive surgery for carcinoma of the breast, with flanking shadow boxes carrying kodachrome transparencies illustrating each, with ribbon indicators leading from text to picture. (2) Two 30 x 40 cards on each side to illustrate experience with carcinoma of the breast at the Cook County Hospital in 1938, 1943, and 1948, and an analysis of 300 consecutive patients presenting breast findings.

Title: "Deafness and Its Management"

Exhibitor: Arthur L. Juers, Raymond Carhart, George E. Shambaugh, Eugene L. Derlacki, Department of Otolaryngology, Northwestern University Medical School. Department of Speech of Northwestern University.

A brief resume is made of the present testing technics used to diagnose deafness, to measure its degree and to determine the appropriate treatment and audiological management. A method of closing tympanic perforations is described together with a summary of results. The

essential features of the Northwestern fenestration technic are briefly described. End results obtained by this technic are tabulated. The problems and clinical entities which have been discovered as a result of the new "controlled speech" technics for testing are reviewed. Emphasis is given to phonemic regression, a special problem found frequently in presbycusis.

Title: "Forceps"

Exhibitor: Frederick H. Falls, Charlotte S. Holt, University of Illinois College of Medicine and the State Department of Public Health

The subject is presented by means of models, drawings, moulages, lettered charts and graphs. The maternal and fetal pathology is stressed. Indications and conditions together with contra-indications are set forth. Operative technics are demonstrated for low, mid and high forceps.

Title: "Congenital Heart in Clinical Medicine"

Exhibitor: Benjamin M. Gazul, E. H. Sell, Hans Popper, Maurice Lev, William Mavrelis, James Campbell, Raul Casas, Hans Hartenstein. Hektoen Institute and University of Illinois College of Medicine

The diagnosis and treatment of congenital malformations of the heart, based on a study of about 300 cases, is presented. The study includes history, physical examination, x-rays, fluoroscopy, electro-cardio-stethograms, angiocardiology, and catheterization of the heart chambers and vessels.

Title: "Cytological Smear Diagnosis of Cancer"

Exhibitor: Bernard M. Chapman, Isador Pilot, Kay Warner, Edgewater Hospital, Chicago

The cytologic smear diagnostic work done at this institution in the past two years will be shown. This will include vaginal, rectal, gastric, sputum, urine, pleural and ascitic smears. There will be charts and drawings showing our technics and statistics, mounted color photographs showing normal and abnormal cells. An illuminated screen will show Kodachrome slides of cases diagnosed by the smear method. Regular 15 minute talks will be given during the day.

Title: "Rehabilitation Program for the Hare Lip and Cleft Palate Children"

Exhibitor: Wayne B. Slaughter, Wisconsin General Hospital, Madison, Wisconsin. Stritch School of Medicine of Loyola University. Loyola University School of Dentistry.

The incidence and frequency of hare lip and cleft palate in children will be shown. All phases of treatment, including plastic surgery, orthodontia, prostheses, speech, and social service will be demonstrated, as well as the correlation of these services to the fields of pediatrics and anesthesia.

Title: "Management of Intestinal Obstruction"

Exhibitor: Gustav Zechel, Departments of Anatomy and Surgery of the University of Illinois College of Medicine

A number of charts and photographs are used to show methods of diagnosis and treatment of intestinal obstruction.

Title: "Anatomy and Pathology of the Facial Nerve"

Exhibitor: Marvin J. Tamari, Arthur Loewy, A. E. Fogo, Illinois Eye and Ear Infirmary of the University of Illinois College of Medicine

There will be anatomical dissections and specimens, x-ray films, microphotographs and wall charts demonstrating relationships, central pathways, and peripheral distribution of the facial

nerve. There will be photographs demonstrating the clinical findings of facial nerve lesions.

Title: "Medical Activities of the National Guard"
Exhibitor: Illinois National Guard — Medical Department Illinois National Guard

Maps with locations of military and medical installations will be shown. Charts will show the allocation of medical units and personnel. There will be photographs of medical activities and equipment. A demonstrator will be present.

Title: "Rabies in Animals"

Exhibitor: J. S. Bengston, W. A. Young, C. N. Bramer, American Veterinary Medical Association
There will be charts and photographs depicting the incidence of rabies and showing the animals susceptible to this disease. Diagnostic procedures and effective control measures are outlined.

Title: "Diseases of Nails"

Exhibitor: Cleveland J. White, Robert H. Harris, Department of Dermatology, Stritch School of Medicine of Loyola University
Moulages, photographs, and descriptive charts are used to show the more common diseases of the nails.

Title: "Bone Marrow"

Exhibitor: Carroll L. Birch, Louis R. Limarzi Department of Medicine of the University of Illinois College of Medicine

The clinical application of sternal puncture is shown. Technics of puncture are demonstrated. Transparent Kodachromes depict the normal and pathologic bone marrow. The embryology, physiology, and pathology of bone marrow are detailed.

Title: "The Dermatological Album"

Exhibitor: David V. Omens, Harold D. Omens, Rush Medical College, Division of the University of Illinois

A complete review of dermatological lesions is accomplished by means of Kodachromes.

Title: "Studies on Gastric Acidity"

Exhibitor: L. L. Hardt, F. Steigman, R. Schlesinger, S. E. Krasnow, Hektoen Institute for Medical Research of the Cook County Hospital. Department of Internal Medicine, Stritch Medical School of Loyola University. Department of Internal Medicine of the University of Illinois College of Medicine

By means of charts and diagrams, the effects on gastric acidity by various substances are demonstrated. The antacid effect of alkali amphoteric substances, organic substances, sedatives and antispasmodics is demonstrated and discussed. An evaluation is presented of the present day methods for studying antacid effects in the light of the daily variations in gastric acidity in both the stimulated and unstimulated stomach. The value of the various modes of antacid administration are discussed and demonstrated by gastroscopic views.

Title: "The Use of the Rapidograph in Angiography and Aortography as an Aid in the Diagnosis of Congenital Heart Disease"

Exhibitor: Wendell G. Scott, Sherwood Moore Department of Radiology, Washington University School of Medicine, St. Louis, Missouri

There are a series of photographs and appropriate descriptions of the tautograph and rapidograph. These x-ray machines were developed for the rapid serialization of x-ray exposures.

The tautograph transports ten 11 x 14 x-ray cassettes so that films can be made at the rate of one per second. The rapidograph utilizes a roll of x-ray film 9 1/2 inches by 77 feet long and automatically makes x-ray exposures every 2/3rds of a second. By means of these equipments and technic of angiocardiology and aortography have been simplified, made more practical and can now be adapted to the study of infants and children with congenital heart defects. A series of x-ray films demonstrating the various types of congenital heart disease are included.

Title: "Poliomyelitis"

Exhibitor: Doctor Pollock and Associates, Northwestern University Medical School
Presentation of the methods of diagnosis and management of poliomyelitis.

Title: "Medical Assistance Program, Illinois Public Aid Commission"

Exhibitor: Carl K. Schmidt, Jr., Executive Secretary, Illinois Public Aid Commission, State of Illinois
Facilities and purposes of the Illinois Public Aid Commission.

Title: "The Cancer Problem Today — Early Diagnosis"

Exhibitor: Illinois Division American Cancer Society
Charts and photographs depicting technics for the early diagnosis of cancer.

Title: "Fresh Tissue Exhibit"

Exhibitor: Illinois Society of Pathologists
Demonstration of fresh pathological specimens. Review of systemic pathology by means of automatically projected Kodachrome films.

Title: "The State Toxicologist"

Exhibitor: W. J. Camp Department of Pharmacology, The University of Illinois College of Medicine.
A description of the duties of the toxicologist in aiding law enforcement.

Title: "Intercapillary Glomerulosclerosis"

Exhibitor: Jerome T. Paul, Eugene J. Ronke University of Illinois College of Medicine, Department of Medicine

The Clinical, laboratory and pathological findings characteristic of intercapillary glomerulosclerosis are demonstrated. This data is based on a study of twenty-five cases. Ten cases of this series were studied pathologically. The relationship of this disease process to diabetes mellitus is stressed. Photographs of the fundi are included to illustrate the changes involving the retinal vessels. The typical kidney lesions are demonstrated by several photographs.

Title: "Cerebral Angiography"

Exhibitor: Oscar Sugar University of Illinois College of Medicine

Diagrams to show technics of injection of diodrast or thorotrast into the carotid artery or vertebral arteries to visualize all of the major intracranial vessels. X-rays will show logy. The indications and contra-indications various deformities of the vessels representing pathology. The indications and contra-indications for angiography and the sequellae are briefly enumerated.

Title: "Hemoptysis"

Exhibitor: Edwin R. Levine, Abel Froman, H. Sapoznik, William S. Klein Michael Reese and Win-gate Hospitals

Hemoptysis is discussed as a presenting symp-

tom. X-ray and clinical histories of cases with this presenting symptom are shown to demonstrate the various pathological entities. Similarity in clinical picture and x-ray is demonstrated with method of differential diagnosis. A scheme of differential diagnosis and work-up is presented.

Title: "Occupational Therapy in the Following Fields: General Medicine, Surgery, Tuberculosis, Pediatrics, Orthopedics and Psychiatry".

Exhibitor: Illinois Occupational Therapy Association

Title: "Monilial Granuloma"

Exhibitor: Frederick N. Hauser, Stephen Rothman University of Chicago

This condition, characterized by chronic intracutaneous granulations of scalp and face, with typical nail and mucous membrane changes, multiple cutaneous horn formation, and abundant mycelial elements in scrapings, is presented as a prototypically occurring disease entity. Ten cases from the literature are assembled and presented together with a recently observed case. The clinical, mycological and histopathological findings are shown in photographs. The biological characteristics peculiar to this *Candida Albicans* infection are enumerated.

Technical Exhibits.

ABBOTT LABORATORIES, Booth 76

Abbott Laboratories will display the Aerohaler, a new device for administering powdered penicillin to the upper respiratory tract and lungs. It was developed by Abbott in conjunction with Drs. Louis Krasno, Mary Karp and P. S. Rhoads of Chicago. Enlarged models will show the discharge chamber, the detachable mouthpiece and nose-piece, and the Abbott sifter cartridge, which contains 100,000 units of finely powdered crystalline penicillin G sodium.

AHLSTROM SURGICAL COMPANY, Booths 106 and 107

Ahlstrom Surgical Company will exhibit a selected line of fine instruments, physicians' supplies and office sundries.

A. S. ALOE COMPANY, Booths 92 and 93

The A. S. Aloe Company cordially invites you to visit booths 92 and 93. In addition to a complete cross section of surgical, medical, and laboratory equipment and supplies, of special interest will be a display of government surplus instruments. All of these instruments are new, first quality instruments which are currently being offered at one third to one half list price.

AMERICAN HOSPITAL SUPPLY CORPORATION, Booths 104 and 105

American Hospital Supply Corporation will exhibit all Baxter Parenteral Products—Intravenous Solutions, including Protein Hydrolysate—Baxter, Blood Transfusion and plasma equipment and disposable accessories for their administration; all Blood groupings Serums; Tomac Oxygen Nebulizer for inhalation therapy; and certain selected Tomac products, to include the new Tomac Oral Protein Supplement.

ARMOUR LABORATORIES, Booths 94 and 95

The Armour Laboratories extends a cordial invitation to the members of The Illinois State Medical Society to visit their display of Medicinal Products of Animal Origin in booths Nos. 94 and 95.

The following books are available to members of the Assembly—"Function and Malfunction of the Biliary System" and "The Thyroid Gland and Clinical Application of Medicial Thyroid". Also, descriptive literature on Armour preparations.

AYERST, MCKENNA & HARRISON, Booth 32

Ayerst, McKenna & Harrison will exhibit "Premarin" (Estrogenic Substances—water-soluble)—a highly effective and well-tolerated preparation of naturally-occurring, orally-active conjugated estrogens (equine). The potency of "Premarin" is expressed in terms of its principal estrogen sodium estrone sulfate.

"Premarin" provides convenience of administration and flexibility of dosage. Four potencies of "Premarin" tablets are available. "Premarin" is also presented in liquid form.

BARD-PARKER COMPANY, INC., Booth 63

Bard-Parker Company, Inc., will exhibit Bard-Parker RIB-BACK surgical knife blades; surgical knife handles, including long handles for deep surgery, laboratory handles, and hysterectomy and eye handles; Bard-Parker Germicide—a sporicidal solution; instrument sterilizing containers; Chlorophenyl, an ideal office instrument disinfectant.

A. C. BARNES COMPANY, BOOTH 81

The A. C. Barnes Company, New Brunswick, N. J., Booth 81, cordially invites all physicians to visit their new exhibit. ARGYPULVIS, a recent addition to the BARNES line, will be featured by a series of illuminated color transparencies depicting an effective new treatment for Trichomonas vaginalis vaginitis. Literature and professional samples will be available. ARGYROL and OVOFERRIN also will be on display.

BILHUBER-KNOLL CORPORATION, Booth 69

The fine medicinal chemicals which fill a most important place in the physician's armamentarium of dependable and useful medication, Bromural, Dilaudid, Metrazol, Octin, Theocalcin, etc., are found at the Bilhuber-Knoll Booth No. 69.

Visit their exhibit for the latest developments among these and their other prescription chemicals. Each is adaptable for prescribing alone or in combinations to meet the needs of the individual patient.

BLUE CROSS PLAN FOR HOSPITAL CARE, Booths 6, 7, and 8

The Blue Cross Plan for Hospital Care will display a lighted shadow box showing the growth and services of Blue Cross and Blue Shield Plans in Chicago and nationally, and how they are combating the trend toward socialized medicine and the Federal control of hospitals.

THE BORDEN COMPANY, Booth 101

A new improved better than ever BIOLAC is presented in Booth No. 101—better nutritionally and better physically. Unchanged are the dilutions, analysis, caloric values, vitamin fortification, and ease of feeding. This new improved Biolac, a liquid modified milk for infant feeding, brings to you the latest findings of nutritional science . . . at no increase in cost.

Likewise exhibited will be our long established products for infant feeding; DRYCO, MULL-SOY, MERRELL-SOULE SPECIAL MILKS, general purpose KLIM, and BETA LACTOSE.

BROOK HILL FARMS, INC., Booth 56

Brook Hill Farms of Genesee Depot, Wisconsin and Chicago have been producing Certified Milk under Medical Milk Commission supervision since 1910. Recently Howard T. Greene, President, announced that the Chicago Medical Society Milk Commission had Certified Curtiss Candy Farms at Cary, Illinois to help take care of the demand for Certified milk and its products.

Certified Milk is a Free Enterprise phenomenon. Nowhere in the world today is there a better example of the American way—in which a purely voluntary group of up-to-date scientific farmers join forces with a committee of enlightened individual physicians for the production, control and sale of the most vital single commodity we have—MILK.

THE BURDICK CORPORATION, Booth 66

The Burdick Corporation will exhibit their line of Physical Medicine Equipment including Short Wave Diathermy, Ultra-violet and Infra-red Lamps and the Rhythmic Constrictor. A feature of special interest will be their new Direct-Recording Electro-cardiograph.

CAMBRIDGE INSTRUMENT COMPANY, INC., Booth 9

Important developments in this well-known line of diagnostic instruments will be on display. Included in this exhibit will be the "Simpli-Trol" Portable Models of the traditionally accurate Cambridge Electrocardiograph and Electrocardiograph-Stethograph-Pulse Recorder. Other important instruments will also be shown. The new Cambridge Electrocardiograph continuously records heart border motion at selected points along the cardiac silhouette; it utilizes a pick-up device which can be fastened to the screen of any standard fluoroscope. The new Cambridge Plethysmograph records variations in the size of human extremities as determined by the fullness of the blood vessels; tracings are standardized, quantitative and reproducible. W. H. Jefferson in charge.

CAMEL CIGARETTES, Booths 26, 27 and 28.

Camel Cigarettes will present a dramatic full color review of their recent medical research on smoking, as well as the details of the nationwide survey showing that "More Doctors Smoke Camels Than Any Other Cigarette." Another panel will illustrate the absorption of nicotine in the respiratory tract. Representatives will be present.

CARNATION COMPANY, Booth 111

You are invited to visit booth No. 111 where you will see an attractive display on Carnation Evaporated Milk—"the milk every doctor knows." Some valuable information on the use of this milk for infant feeding, child feeding, and general diet will be presented and the method by which Carnation is generously fortified with pure crystalline Vitamin D-400 U. S. P. units per reconstituted quart—will be explained. Interesting literature will also be available for distribution.

THE CENTRAL PHARMACAL COMPANY, Booth 14

The Central Pharmacal Company display will feature new, improved triple-sulfa products because they represent greater safety and effectiveness in the treatment of a large list of infections. These products have been accepted by the A. M. A. Council.

The Synophyllate, or Theophylline-Sodium Glycinate products, will be displayed since they represent superior forms of Theophylline based on better tolerance and increased effectiveness. Synophyllate, or Theophylline-Sodium Glycinate, has also received the seal of approval of the A. M. A. Council on Pharmacy and Chemistry.

Our Neocylate products will be prominently featured on the basis they represent the first definite improvement in salicylate therapy for over twenty years. Physicians will be interested in examining these products since they will help solve many problems encountered in the treatment of rheumatic fever and other rheumatoid conditions.

A friendly welcome awaits all physicians who honor us by visiting the Central booth.

THE CHICAGO DIETETIC SUPPLY HOUSE, Booth 68

Special dietary foods for the low sodium, allergy and restricted carbohydrate diets, including a complete line of water-packed and juice-pak fruits, salt-free vegetables, salt-free bread, allergy flours and bread will be exhibited.

Food scales and other equipment for the diabetic's use will be featured.

CHICAGO MEDICAL SOCIETY, Booth to be assigned

CHICAGO PHARMACAL COMPANY, Booth 84

Chicago's largest complete pharmaceutical house will feature the latest in estrogenic and androgenic hormone preparations, as well as the twelve fine specialties added to the line in 1948.

CIBA PHARMACEUTICAL PRODUCTS, INC., Booth 54

Ciba Pharmaceutical Products, Inc., Summit, New Jersey (Booth 54) invites you to visit their exhibit for latest information on PRISCOL, a valuable adjunct to the treatment of peripheral vascular disease. PYRIBENZAMINE HCL, the antihistaminic drug for prevention and relief of anaphylaxis and many forms of allergy will also be featured. Representatives in attendance will gladly answer any questions about these and other Ciba products.

THE COCA-COLA COMPANY, Booths 49 and 50

Ice-cold Coca-Cola will be served complementarily through the courtesy and cooperation of the Coca-Cola Bottling Company of Chicago and The Coca-Cola Company.

CONTOUR CHAIR-LOUNGE COMPANY, INC., Booth

33

CORECO AUTOMATIC COLOR CAMERA, Booth 30

The Coreco Camera is designed to photograph all surface areas of the body—from 1 to 1 close-up pictures to half-body size and all cavities of the human body, such as mouth, throat, ear, nose, vagina, and rectum. The camera carries its own specially developed fully color-corrected bulb and a mechanism for complete control of its color temperature and exposure within the camera itself. There is an automatic view finder synchronized with the automatic camera mechanism to pre-

mit viewing until a fraction of a second before exposure. The Camera provides for automatic focusing.

DANIELS SURGICAL & MEDICAL SUPPLIES, Booths 23 and 24

Anything and everything in the Surgical & Medical field, featuring Stephens Medical examination and treatment furniture made of high grade matched wood in walnut and fawn finishes; a representative line of new instruments, the new approved and accepted Burdick X-85 Diathermy and the first public showing of the New Burdick Direct Reading Electrocardiograph. The exhibit will be under the supervision of Dan Roback assisted by Dar Kelley and Carl Hinz.

DOAK COMPANY INC., Booth 39

Doak Company Inc., will exhibit colloids of bismuth, calcium, iodine and iron for parenteral administration in the treatment of arthritis, syphilis, calcium and iodine deficiency, as well as dermatological preparations for the treatment of various skin manifestations.

DOHO CHEMICAL CORPORATION, Booth 96

The makers of auralgan are featuring at this meeting their new sulfa preparation O-TOS-MO-SAN, indicated in the treatment and control of chronic suppurative ears. Also, Mallon, Division of Doho is introducing our new topical anesthesia, Rectalgan, for relief of pain and discomfort in hemorrhoids and pruritus. This new therapy enjoys many advantages over the outmoded rectal suppositories and ointments.

Our representatives will be happy to explain, in detail, the workings of these medications.

ELECTRO-MEDICAL EQUIPMENT COMPANY, INC., Booth 109

EISELE AND COMPANY Booth 64

Eisele and Company will display their quality line of hypodermic syringes, needles and clinical thermometers.

ELI LILLY AND COMPANY, Booth 114

Your Lilly medical service representative cordially invites you to visit the Lilly exhibit located in Space No. 114. Many new therapeutic developments will be featured and literature on these products will be available. Lilly medical service representatives are to be in attendance to aid visiting physicians in every way possible.

ENCYCLOPAEDIA BRITANNICA, Booth 79

FARNSWORTH LABORATORIES, Booth 55

Specializing in parental medications, high potency vitamin solutions, a prolonged, aqueous base, local anesthetic, and perhaps you may be interested in migraine headaches, undulant fever, or sinus infections. There have been important advancements made in the treatment of these conditions, and our trained personnel will be glad to discuss these fields with you.

H. G. FISCHER & CO., Booth 74

In Booth 74 see H. G. FISCHER & CO.'S modern, outstandingly efficient yet low priced X-Ray and Physical Therapy Apparatus! Have its many features of unquestioned advantage demonstrated without obligation. Inquire as to their other models of unsurpassed value not on exhibit.

H. G. FISCHER & CO.'S 38 years devoted solely to designing and manufacturing x-ray and physical therapy equipment make them leaders in this field and guarantee products of dependable performance and great durability.

Your visit will be welcome and appreciated.

C. B. FLEET CO., Booth 112

C. B. Fleet Co., Inc. cordially invites you to stop by Booth No. 112 for a short visit with Mr. William S. Holt and Mr. Gordon Myers, the representatives who see you in your office about once a year. Perhaps there is something about Phospho-Soda (Fleet), the pure, stable, aqueous concentrate of the two U. S. P. Sodium Phosphates, you would like to discuss with them.

FREEMAN X-RAY COMPANY, Booths 12 and 13

H & M SALES COMPANY, Booth 77

H & M Sales Company will exhibit the new Art Cleaner, a self wringing sponge rubber all purpose cleaning appliance. The new Art Cleaner is the finest cleaning tool made for quick easy cleaning of all types of floors, such as linoleum, tile, painted concrete, wood etc. Can also be used as a dustless broom, as a wax applicator. Quick level action wrings and cleans sponge rubber as desired.

Special Note: The new Art Cleaner does a perfect job in picking up spilled liquids, easily and quickly. You'll be more than satisfied with the many uses you will find for this cleaner.

HANOVIA CHEMICAL AND MANUFACTURING COMPANY, Booth 80

Entirely new Wall Type Aero-Kromayer Lamp for orificial application and general body type ultraviolet lamps will be on displays as well as Sollux Radiant Heat Lamps for destruction of air-borne bacteria and a new Short Wave Diathermy Machine. We welcome your visit.

HARROWER LABORATORY, INC., Booth 20

The Harrower Technical Exhibit presents gastrosopic and acidity control studies relative to Mucotin, a new treatment for peptic ulcer. The exhibit has three main points of interest. (1) A case history report of a patient with a large benign crater ulcer. The ulcer and its response to treatment are illustrated gastrosopically. (2) Gastrosopic studies showing the coating action of Mucotin. (3) Graphic presentation of the acid neutralizing effectiveness of the various antacids. Mucotin is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. Literature and samples will be available.

HOFFMANN-LA ROCHE INC., Booth 35

Roche will feature Thephorin Ointment, a superior antihistamine with antipruritic properties. It is also valuable for allergic dermatoses and insect bites. In addition, Thephorin, available in syrup and tablet forms, is very helpful for the relief of allergic conditions. Presidon "Roch" a mild sedative-hypnotic that is not a barbiturate, will be displayed also.

HOLLAND-RANTOS COMPANY, INC., Booth 10

You will want to see the anatomically correct PELVIFORM Clinical Teaching Model with its unique "swinging" uterus. Don't miss seeing the attractive, convenient and practical ivory-color plastic containers in which complete sets of Koromex Contraceptive Specialties are now being packaged. Be sure to obtain your professional sample, not only of "Council-accepted" KOROMEX JELLY and CREAM, but also of NYLMERATE JELLY, an effective trichomonicide that is convenient and inexpensive for patients to use at home.

HOMEMAKERS' PRODUCTS CORPORATION, Booth 11

DIAPARENE (formerly called DIAPENE)—Non-volatile, non-mercurial antiseptic for skin and diaper as protection against irritating bacteria deposited on skin by stool and urine. Comes in ointment for skin and as tablet for antiseptic rinsing of genital napkin to prevent ammonia formation. Non-irritating, non-allergic, non-toxic.

ILLINOIS TUBERCULOSIS ASSOCIATION, Booth 75

The Illinois Tuberculosis Association will exhibit an x-ray hospital admission display which is composed of three panels. It shows a picture of unrecognized tuberculosis, tuberculosis in hospital personnel and routine chest x-ray. The exhibit tells a simple story of the importance of routine chest x-rays to all hospital admissions.

Another flasher exhibit with a description of chest x-rays and the importance of chest surveys will be exhibited. An additional exhibit on the importance of rehabilitation will be shown.

In addition to the above displays the Association will provide samples of up-to-date publications and pamphlets on tuberculosis which are primarily written for physicians.

IRWIN, NEISLER & COMPANY, Booths 47 and 48

You are cordially invited to visit our exhibit. There will be displayed such clinically valuable products as Veratrite and Vertavis for the treatment of hypertension. A staff of trained professional service representatives will be in attendance to answer any of your questions and assist you in any way possible.

"JUNKET" BRAND FOODS, Booth 71

Essential facts on the chemistry of the rennet enzyme and the nutritional significance and psychologic value of rennet desserts in the diets of infants and adults will be explained. The enzymatic action of rennet in producing softer, finer, more readily-digestible milk curds is illustrated by enlarged photos. Literature giving the dietary applications of rennet products is available for your reference.

LANTEEN LABORATORIES, INC., Booth 78

Lanteen Laboratories, Inc., cordially invite you to visit booth No. 78. Representatives will be pleased to discuss with you the new diaphragm fitting technic.

LEDERLE LABORATORIES, Booth 108

You are cordially invited to visit our exhibit in booth 108 where you will find representatives who are prepared to give you the latest information on Lederle products.

J. B. LIPPINCOTT COMPANY, Booth 2

J. B. Lippincott Company presents an interesting and active exhibit of professional publishing. With the "pulse" of practice centering in an advisory editorial board of active clinicians who constantly review the field, current and coming trends in medicine and surgery are known con-

tinually. On the studied recommendations of these medical leaders, Lippincott Selected Professional Books are undertaken.

M & R DIETETIC LABORATORIES, INC., Booth 86

M & R Dietetic Laboratories, Inc., Booth number 86, will display Similac, a food for infants. Our representatives will appreciate the opportunity to discuss the merit and suggested application for both the normal and special feeding cases.

MEAD JOHNSON & COMPANY, Booth 113

Mead Johnson & Company, Evansville, Indiana (Booth No. 113). Amigen and Protolysate will be on display at the Mead Johnson Exhibit at your Illinois State Medical Society Meeting. Mead Johnson has pioneered the amino acid field commercially; the products have been described in more than four hundred articles in the medical literature. Trained representatives will be at the Mead Exhibit to discuss details of the new amino acid products. Shown also will be Dextrin-Maltose, Pabulum, Pabena, Oleum Percomorphum and the other Mead Products used in Infant Nutrition. Protenum, a new high-protein product will be displayed. Also Lonalac for low-sodium diets.

MEDICAL AIDS, INC., Booth 100

S. V. Bentley will have charge of the Medical Aids, Inc. exhibit and will describe in detail the technique of applying the new Combination Pressure bandage, Contura plus Presoplast which is used in treating Phlebitis, Thrombophlebitis, Leg Ulcers, and Osteoarthritis of the Knee.

MEDICAL ARTS SUPPLY COMPANY, Booth 67

The Medical Arts Supply Company of Chicago will include a cross section of surgical instruments, equipment and supplies, to conform to their sales slogan: "From a Bank Pin to an X-Ray." A feature of the exhibit display will be the Edin Electro-Cardiograph, which has now received Council approval.

THE MEDICAL PROTECTIVE COMPANY, Booth 83

The Medical Protective Company's representative, thoroughly trained in Professional Liability underwriting, invites you to visit exhibit booth 83. He is entirely familiar with the principles of the reciprocal rights and duties of a doctor and patient and with the circumstances peculiar to that relationship. He will be glad to explain how his Company meets the exacting requirements of adequate liability protection, which are peculiar to the Professional Liability field.

THE WILLIAM MEYER COMPANY, Booth 46

Over forty-five years of building quality X-Ray machines for critical users has enabled us to develop a complete line to fill the need of practically any installation. From 15-75 through 100/100 X-Ray units complete with stands, buckies, tilt-tables, and other accessories, we can supply your needs. Visit us at Booth No. 46 where our representative will be happy to answer any questions you may have without obligation.

THE C. V. MOSBY COMPANY, Booth 53

You are cordially invited to visit the C. V. Mosby Company booth No. 53 and to examine at your leisure many of our outstanding recent releases. These include such titles as Campbell-Speed "Operative Orthopedics", Merrill-Picker "Atlas of Roentgenographic Position", Duke-Elder volumes "Textbook of Ophthalmology", Ackerman-Regato "Cancer", Gradwohl "Clinical Laboratory Methods and Diagnosis", Ilgenritz "Preoperative and Postoperative Care", Crossen "Operative Gynecology", Sutton "Handbook of Diseases of the Skin", Vaughn-Black "Practice of Allergy" and many others.

V. MUELLER & COMPANY, Booth 1

A representative selection of instruments and equipment for all branches of surgery and the latest in modern medical furniture will be displayed in the Mueller Exhibit, Booth No. 1.

THE NATIONAL DRUG COMPANY, Booth 73

RESINAT—completely non-toxic, anion exchange resin antacid and pepsin inhibitor, and PROTINAL POWDER—delicious, micro pulverized whole protein carbohydrate, will be the featured products. Samples and literature will be available. Trained representatives will be on hand to answer inquiries concerning any of National's vast array of Pharmaceutical, Biological and Biochemical preparations.

ORTHO PHARMACEUTICAL CORPORATION, Booth 65

Ortho cordially invites you to visit Booth No. 65. Here will be featured Ortho-Gynol, Ortho-Creme, the Ortho Diaphragm and other items which constitute the well known line of Ortho control of conception specialties. New styles of packages and units which are designed to more completely fulfill the needs of your patients will be displayed.

PARAVOX, INC., Booth 62

The PARAVOX Neon Plastic Chassis Display, one of the most distinctive of its kind, has been used at numerous fairs and conventions throughout the nation and has received much favorable comment.

The display shows the steps, mounted in gold lettering on a black mirrored surface, in the assembly of PARAVOX Hearing Aids. Luminous plastic has been used to mold the chassis, and hidden neon tubes surround the display case of red and black fluted columns giving the unit back lighting.

PARKE, DAVIS & COMPANY, Booth 4

Parke, Davis & Company Medical Service Staff Members will be available at our Commercial Exhibit for consultation and general discussion regarding Products classified in our Pharmaceutical Antibiotic, Biologic, and Medicinal Lines. Unusual Specialties such as Penicillin S-R, Benadryl, Vitamins, Etamon, Chloride, Oxyel, Thrombin Topical, Influenza Virus, Vaccine, Hypnotic, Antibiotics, and various Biologics will be featured. You are cordially invited to call at our Exhibit with the assurance your interest will indeed be very much appreciated.

PHILIP MORRIS & CO. LTD., INC., Booth 83

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches in this subject, and problems on the physiological effects of smoking.

PICKER X-RAY CORPORATION, Booths 102 and 103

Picker X-Ray Corporation will exhibit the "CENTURY" self-contained unit providing for Fluoroscopy and Radiography in all positions from the vertical to the trendelenberg. This unit is shown as a 100 MA installation but it is obtainable also as a 200 milliamperes unit.

There will also be on display the new improved GYNOGRAPH for utero tubal insufflation.

PROFESSIONAL BUDGET PLAN, Booth 17

Efficient office organization, effective control of accounts, and ethical practice-building ideas key the success of the personalized Professional Budget Plan. Collection of cash and time payments (old accounts, too), a smoothly functioning appointment system, and simplified bookkeeping are but three of the major points covered. See the special counsellor at the booth to learn how this modern business system fits your practice.

PROFESSIONAL EQUIPMENT COMPANY, Booths 57 and 58

J. B. ROERIG AND COMPANY, Booth 31

E. J. Rossman M. D.,

MEDICAL COLOR PHOTOGRAPHY, Booth ??

The 35 mm Medical Color Photography exhibit will feature a universal base for quality foreign and domestic 35 mm cameras. This superbly engineered, low cost, compact apparatus makes it easy for a doctor to obtain outstanding color pictures in office or hospital without using flash bulbs or flood lights. Just plug in at any electrical outlet, adjust your precision calibration for the desired distance and snap your picture at a high speed.

SANBORN COMPANY, Booth 82

An exhibit of interest to clinicians, specialists and research men alike—in the fields of cardiology and endocrinology—will be found at the Sanborn Company Booth No. 82.

On display will be working models of such clinical diagnostic instruments as the Sanborn Metabolator, the "all-enclosed" metabolism tester; and the Sanborn Viso-Cardiette, leader among direct writing electrocardiographs.

These will be supplemented by more specialized, research-type equipment, including the Poly-Viso Cardiette, multi-channel biophysical research recorder; the Electromanometer, outstandingly useful for a wide variety of venous, arterial, intracardiac, and other "pressure" recordings; and other diagnostic instruments of still more recent development.

SANDOZ CHEMICAL WORKS, INC., Booth 90

Among recently released Sandoz Medicinal Specialties are—Methergine (Methyl Ergonovine) a partial synthetic oxytocic; Mesantoin (Methyl-phenyl-ethyl Hydantoin) and Hydantal (Mesantoin plus phenobarbital) anti-convulsants for the control of reduction in the frequency of epileptic seizures; Dihydroergotamine "Sandoz" (D. H. E-45), the improved non-narcotic relief for migraine-Dihydroergotamine lessens incidence of nausea and vomiting, uterotonic effect of ergotamine is practically eliminated, sympathico-inhibitory effect is enhanced. Other well known Sandoz products include Belladonal, Bellergal, Bellafoline, Cedilanid, Digilanid, Neo-Calgulon Syrup and ampul solution.

W. B. SAUNDERS COMPANY, Booth 36

We invite the doctors attending the Illinois State Medical Society Meeting to visit our booth where Mr. Charles Jenkinson will display a complete line of our books including Hyman's "Integrated Practice of Medicine," Bockus' "Gas-troenterology," Meleney's "Treatment of Surgical Infections," Snyder's "Obstetric Analgesia and the Child," Lyons &

Woodhall's "Atlas of Peripheral Nerve Pathology," Crile's "Practical Aspects of Thyroid Disease," Conn's "Recent Advances in Therapy," DeGowin, Hardin & Alsever's "Blood Transfusion," Levine & Harvey's "Clinical Auscultation of the Heart," Beckman's "Treatment," Levine's "Clinical Heart Disease," Cecil's "Medicine," Christopher's "Minor Surgery," Dowling's "Acute Bacterial Diseases," Brams' "Treatment of Heart Diseases," and many others.

SCHENLEY LABORATORIES, INC., Booth 34

The Schenley Laboratories' exhibit features Titalec, an extremely palatable antacid with a titration curve very similar to that of milk. Also on display will be Rutaminal, an exclusive Schenley specialty combining rutin, aminophylline, and phenobarbital; Orapens—buffered penicillin tablets of varying strengths; Monocillin, a procaine penicillin product producing 96 hour blood levels; and Aquacillin, procaine penicillin for aqueous injection.

Well informed personnel will be in attendance. Samples of various products will be available.

SCHERING CORPORATION, Booth 3

Among the new pharmaceutical and hormone preparations developed in the Schering research laboratories, MICROPELLETS PROGYNON will be featured. This new potent form of the female sex hormone, alpha estradiol, provides maximum results at minimum cost to the patient. COMBISUL and COMBISUL LIQUID, the triple sulfonamide combinations which eliminate the dangers of sulfonamide renal damage will also be presented. TRIMETON, the outstanding antihistaminic will highlight the exhibit. Schering Professional Service Representatives will be present to welcome you and will be happy to answer your inquiries concerning Schering's new products as well as their other hormone, x-ray diagnostic, chemotherapeutic, and pharmaceutical specialties.

G. D. SEARLE & COMPANY, Booth 115

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Featured will be Ruphyllin, for abnormal capillary fragility, Hydrillin, new and effective antihistaminic, as well as such time-proven products as Searle Aminophyllin in all dosage forms, Metamucil, Ketochol, Floraquin, Kiophyllin, Diodoquin, Pavatrine and Pavatrine with Phenobarbital.

SECURITY LABORATORIES, Booth 38

The Security Laboratories, Burlington, Iowa, the midwest's complete physicians' and surgeons' supply house, is exhibiting Hamilton Furniture, McKesson Basal Metabolators, Sklar stainless steel instruments, Profex X-rays, American Cystoscope Makers, Inc. Urological Instruments and Catheters, Bard-Parker products, Davis and Geck sutures, The B. F. Goodrich Company, and Davol Company rubber sundries, Ritter Company Eye, Ear, Nose, and Throat equipment, the New Burdick Direct Recording Electrocardiograph, and Raytheon 'Microtherm' microwave Diathermy, and other products of leading manufacturers. The exhibit will be under the direction of K. P. McCullough, James A. Frymire, and J. B. Wahl.

SHARP & DOHME, Booth 97

Visitors attending the Illinois State Medical Society meeting are cordially invited to visit the Sharp & Dohme exhibit in booth No. 97. Stable, portable "Lyovac" Normal Human Plasma irradiated to destroy not only bacteria but also the viral contaminants that might cause homologous serum hepatitis merits your attention. Unusual Specialties including the popular sulfonamide and antibiotic drugs also will be of major interest. Courteous attendants will be pleased to serve you.

THE SMITH-DORSEY COMPANY, Booth 16

Injectable and oral preparations will be featured at The Smith-Dorsey exhibit. Al-Si-Cal Powder and Tablets, which are specifically designed for the ulcer patient will be shown, Teotine Tablets for chronic heart conditions will be on display and Ilban Capsules for secondary anemias and general tonic purposes will also be exhibited. The injectable material will cover a wide range of Council Accepted items which will be of interest to all physicians engaged in internal medicines. The Dorsey representatives welcome all physicians to their booth each day of the meeting.

SMITH, KLINE & FRENCH LABORATORIES, Booth 87

'Dexedrine' Sulfate Tablets—Today, 'Dexedrine' Sulfate (dextro-amphetamine sulfate, S. K. F.) is established as the drug of choice for the treatment of depressive states. It produces the desired improvement of mood without giving rise to undesirable side-effects.

In weight reduction, 'Dexedrine' is the most effective drug available for control of appetite. 'Dexedrine' makes it easy for the overweight patient to stop overeating. Unlike thyroid, it has no significant effect on basal metabolic rate, blood pressure, or heart rate.

SPENCER INCORPORATED, Booth 37

On display will be Spencer Individually Designed Supports for abdomen, back and breasts. We particularly invite your investigation of the Spencer Abdominal Spring Pad; the Spencer Mastectomy Breast Support with Breast Forms; and such special orthopedic features as our Outside Pelvic Binder, removable rigid steels with molding tools, and pivoting shoulder straps. Also on display will be the Spencer Blood Pressure Sleeve—a new, convenient, accurate, time-saving item for the busy physician.

E. R. SQUIBB & SONS, Booths 18 and 19

E. R. Squibb & Sons will feature Dihydrostreptomycin and the new Penicillin Disoplator.

STANDARD AIR SERVICE COMPANY, Booth 85

Room Air Conditioners exclusively for almost two decades. Authorized sales and service for Philco individual room conditioners for comfort in the medical office. Hermetically sealed $\frac{1}{2}$ HP and $\frac{3}{4}$ HP window and console model cooling units. All units now covered and protected by a five year warranty.

SUTLIFF & CASE COMPANY INC., Booths 98 and 99

As usual the representatives serving in your territory will be on hand to greet you and acquaint you with a few of our new pharmaceutical preparations. We sincerely invite you to visit our exhibit.

SWIFT & COMPANY, Booth 51

The original all-meat baby foods, Swift's baby foods, Swift's Meats for Babies (Strained) for very young babies and Swift's Meats for Juniors (Diced) for older children are being exhibited by Swift & Company. These high protein, body-building foods are available in six varieties—beet, lamb, veal, pork, heart, and liver. These products are also gaining rapid acceptance for adult special diets. Representatives at the Swift & Company booth will be pleased to furnish general or specific information, and to supply you with informative literature.

UNIVERSAL PRODUCTS CORPORATION, Table Space

THE UPJOHN COMPANY, Booth 88

UPJOHN presents a new sympathomimetic agent, ORTHOXINE, for the prevention and treatment of Bronchial Asthma an orally effective chemical entity singularly specific as a bronchodilator singularly free from side effects.

U. S. VITAMIN CORPORATION, Booth 70

Enlarged color photographs of common oral lesions of nutritional deficiencies including glossitis, cheilosis, gingivitis and others . . . as well as improvement following administration of complete vitamin therapy. Also professional samples and literature on VI-SYNERAL, VI-SYNERAL VITAMIN DROPS, POLY-B, VI-LITRON, HYPERVITAM, LIPO-HEP-LEX, DALSOL, DESIVER, PROTOBAN, VI-SYNERAL INJECTABLE and others.

VARICK PHARMACAL COMPANY, Booth 52

The makers of Digitaline Nativelle, the original digitoxin, have prepared an interesting and informative exhibit on new and broader concepts of treating the failing heart. Emphasis is given to the role of Digitaline (Nativelle,) the preparation of choice in congestive failure.

Literature and samples of Digitaline will be available as well as copies of our recently published, "Low Sodium Diet", brochure. We cordially invite you to visit our exhibit.

WINTHROP-STEARNES INC., Booth 110

Winthrop-Stearnes Inc., New York, extends a cordial invitation to visit its booth No. 110, where representatives will be on hand to discuss the latest pharmaceutical preparations made by this firm. Featured will be Demerol, powerful analgesic, spasmolytic and sedative, especially well suited for pre and postoperative use; Isuprel, new, more efficient and convenient bronchodilator. Tablets for sublingual use, solution for inhalation; Neo-Synephrine, well tolerated prolonged decongestive.

F. E. YOUNG & COMPANY, Booth 72

F. E. Young and Company, Booth No. 72, will exhibit Young's Dilators, Sulf-A-Test, Young's PSP Test Set and Young's Albumin Test.

Young's Dilators are used in the treatment and prevention of contracted anus, particularly following hemorrhoidectomy, as an aid in perineal dissection, and in the repair following delivery. Register for recent reprints.

Sulf-A-Test, Young's PSP Test Set and Young's Albumin Test will be demonstrated. These are accurate, rapid office tests replacing the more time consuming laboratory methods.

ORIGINAL ARTICLES



Hydronephrosis

Herman L. Kretschmer, M.D., D.Sc.
Chicago

Hydronephrosis is of great importance not only to the urologist but to every practitioner of medicine and surgery. It is one of the most frequent lesions of the genito-urinary tract, often runs a silent course and its clinical manifestations are very protean.

The condition may be unilateral or bilateral, infected or noninfected, congenital or acquired. Hydronephrosis presupposes a dilatation of the renal pelvis with stagnation of urine.

With the exception of the cases due to interference of the neuromuscular function, hydronephrosis is always associated with mechanical obstruction. When the subject of hydronephrosis is considered, one is apt to think only of cases associated with obstruction at the uretero-pelvic junction. While this is true in a large number of cases, I shall consider the subject in its broader aspects rather than limit it to the pelvic type of hydronephrosis.

Pathogenesis. — The development of hydronephrosis is dependent upon obstruction to the outflow and the continued secretion of urine.

Primary Renal Atrophy. Great differences of opinion exist, based on clinical and experimental data, of the results of sudden complete occlusion of the ureter. It has been stated that complete obstruction leads to primary atrophy of the kidney without dilatation of the pelvis or tubules. Because of this assumption it has been advised that when necessary during a surgical operation the ureter may be ligated with impunity and that primary atrophy would occur.

Hinman, as a result of his experimental studies in animals, has not met a single case of primary atrophy.

Clinical cases have been reported in which hydronephrosis and not primary atrophy followed ureteral ligation.

Hydronephrotic Atrophy. This term is applied to dilatation of the renal pelvis, and atrophy of the renal parenchyma following any type of obstruction. In a discussion of the development

The Charles B. Taylor Lectureship in Urology. Delivered at the University of Oklahoma, Oklahoma City, January 11, 1949.

of hydronephrosis consideration must be given to the role played by intrapelvic pressure and pelvic reabsorption.

Intrapelvic Pressure. It has long been recognized that intrapelvic pressure plays a role in the development of hydronephrosis. Hinman has shown that although essential it is not the principal factor in its development.

Pelvic Reabsorption. As long as the secreting portion of the kidney continues to function, and there is obstruction to the outflow of urine, some mechanism must exist for equalizing the intrapelvic pressure, or otherwise rupture of a hydronephrotic sac would occur spontaneously. Therefore there must be some counterplay between urinary secretion and absorption from the pelvis at such rate as to permit secretion to continue and yet permit the intrapelvic pressure to produce hydronephrosis.

There are two routes by which reabsorption takes place, namely:

- (1) Tubular absorption
- (2) Pyelovenous backflow

1. It has been shown experimentally that tubular absorption alone is insufficient.

2. Hinman believes that "the occurrence of such pyelovenous backflow accounts for the ability of a kidney to continue active secretion with its ureter completely obstructed, for the finding that the pelvic contents are freshly renewed and similar in concentration of the elements present to what such kidney secretes immediately after relief of obstruction."

In his discussion on the development of hydronephrotic atrophy, Hinman stresses the importance of pressure, anemia, degeneration and disuse. He believes that anemia is the principal factor, that disuse in the later stages becomes a factor of moment, and ultimately leads to atrophy.

Pressure undoubtedly is the primary factor. The pelvis dilates, the tubules dilate and each in turn has a pressure effect upon the venous radicles, with a consequent congestion, and these three pressure factors have their effect on the arterial supply diminishing it, resulting in anemia.

Dilatation of the tubules follows dilatation of the calyces. Henle's loops disappear quickly. The proximal convoluted tubules persist the longest. Glomeruli may be found in the most extreme hydronephrosis.

The later effect of pelvic distention is largely one of anemia. Pressure of the distended tubules limits the flow of blood through the kidneys.

Etiology. — The causes of hydronephrosis may be located in the urinary tract anywhere from the external urethral orifice to the kidney; or the causes may be outside the urinary tract, that is, intra- or extra-peritoneal. They may be congenital or acquired.

In the following table are mentioned the various causes:

- A. Lesions of the Kidney
 - a. Congenital anomalies
 1. Form-size-number-position
 2. Anomalous blood supply
 - b. Acquired lesions
 1. Tuberculosis
 2. Tumor
 3. Solitary cyst
 4. Calculus
 5. Stricture of calyx
 6. Malposition following nephropexy
- B. Lesions of the Renal Pelvis Proper
 - a. Stone
 - b. Tumor
 1. Papillary
 2. Solid
 - c. Blood clots
 - d. Peripelvic adhesions
- C. Uretero-pelvic junction
 1. Stone
 2. Stricture
 3. Aberrant artery
 4. Periureteral adhesions
- D. Ureter
 1. Stone — most common
 2. Stricture
 3. Tumor — papilloma — papillary carcinoma
 4. Anomalous insertion
 5. Adhesions
 6. Compression — outside adhesions tumors
 7. Ureterocele
 8. Ureteritis cystica
 9. Valves (?)
 10. Atony — megaloureter
- E. Bladder
 - a. Anomalies
 1. Ectopia
 2. Diverticulum
 - b. Tumors
 - Carcinoma
 - Papillary carcinoma
 - Papilloma — very rare
- F. Urethro — Vesical
 - a. Prostate
 1. Benign prostatic hypertrophy
 2. Carcinoma

3. Bars and contractures
4. Chronic prostatitis
5. Cysts
6. Congenital valves
7. Hyperthrophy of verumontanum

G. Urethral Lesions

- a. Stricture — very common
 1. Congenital — rare
 2. Acquired
 - Infection — G.C.
 - Traumatic — now on the increase
 3. Phimosis — very rare
 4. Other lesions — rare
 - Stone
 - Tumor
 - Diverticulum

H. Gynecological Lesions

- a. Pregnancy
 1. Most common
 2. Theories
 3. Course
 4. Prevention of infection
 5. Return to normal
- b. Uterus
 1. Carcinoma — 70%
 2. Fibroids — 65%
 3. Endometriosis
 4. Uretero — vaginal fistula
- c. Ovary — 81.8%
- d. Carcinoma of vagina — late

I. Gastro — Intestinal

- a. Rectum
- b. Colon

J. Retroperitoneal Lesions

- a. Tumors
 - Benign
 - Lipoma
 - Malignant
- b. Retroperitoneal cysts
- c. Hodgkin's disease
- d. Metastatic lymph nodes

K. Lesions of Central Nervous System

1. Tabes dorsalis
2. Spinal cord tumors
3. Fractures
 - Automobile
 - Gunshot

In a series of 100 cases taken from my practice, the causes of the hydronephrosis included practically all of the causes listed in the foregoing table. Of course, each doctor's own practice will reveal particular causes as being responsible for the hydronephrosis, depending upon his type of practice, whether it is essentially a practice devoted to men, women, or children.

Symptoms. — One is probably justified to state that there is no typical symptom complex by which a positive diagnosis can be established. In a large number of cases the presenting symp-

toms are those of the underlying pathology responsible for the hydronephrosis.

In many patients hydronephrosis runs a silent course and when symptoms finally bring the patient to his physician he is beyond relief. Examination may show complete destruction of one or both kidneys.

The first symptoms may be those of acute infection, namely, chills, fever and sweats, often with pus in the urine. The absence of pus in the urine may serve to complicate the diagnosis which may be obvious a few days later when the urine shows a large amount of pus.

Some patients complain of the most vague and indefinite abdominal pain, the nature of which is established only when the intravenous urogram shows a marked hydronephrosis.

Pain with nausea and vomiting is quite frequent, especially in children.

Gross hematuria is rare. However, hematuria may be the first symptom as I have seen it after a friendly scuffle, a light tap on the abdomen, vigorous abdominal massage, or following sliding to third base. In these cases the diagnosis may be extremely difficult especially when there is no visualization of the hydronephrotic kidney. In several instances I have seen severe hemorrhages into a large hydronephrosis so that the patients went into profound shock or collapse.

Backache is probably more frequently present than any other symptom. A long standing backache with no response to treatment should arouse at once a suspicion that we are not dealing with a lumbago and an intravenous urogram should be made.

When the patient presents himself with an abdominal tumor associated with symptoms compatible with hydronephrosis, a tentative diagnosis is possible. If the patient volunteers the information that the tumor varies in size, or if by massage he can reduce the size of the tumor, we have further evidence of a hydronephrosis.

Urinary symptoms are rarely due to hydronephrosis.

Diagnosis. — This is based on the intravenous urogram. If the kidney has undergone complete atrophy, there will be no visualization and one must resort to a retrograde pyelogram. Failure to visualize one half of a double kidney is not so uncommon in my experience especially in children. This can often be suspected by careful interpretation of the configuration of the intra-

venous urogram which does visualize. Naturally where any doubt may exist resort to a retrograde pyelogram is in order.

Pregnancy And Hydronephrosis. — Hydronephrosis occurs in every pregnant woman. Some differences of opinion exist as to whether the dilatation of the upper urinary tract is to be considered as a true hydronephrosis or as a physiological dilatation of pregnancy.

The dilatation is primarily due to endocrine activity and secondarily due to the pressure of the pregnant uterus against the brim of the pelvis. Dilatation and pressure lead to obstruction to the outflow of urine. This results in stasis of urine, which predisposes to infection resulting in pyelitis of pregnancy.

Pyelitis of pregnancy is a preventable disease. Foci of infection in the teeth, tonsils and sinuses should be eradicated. Special attention should be directed to the intestinal tract. Intercurrent infections, i.e., colds, should be avoided. If this regime is followed out during pregnancy, the incidence of pyelitis is minimal. We found it to be 0.3% in 9802 deliveries.

With the termination of pregnancy the dilatation rapidly returns to normal. We found a return to normal in two weeks in 59.3%; in 6 weeks in 34.3%; and in 6.2% in 2 weeks.

The persistence of hydronephrosis after termination of the pregnancy implies the presence of an organic lesion that was probably present before the pregnancy. This demands complete urological investigation to determine the cause.

Hydronephrosis And Pelvic Disease. — The incidence of hydronephrosis in various lesions of the gynecological tract is much higher than is generally appreciated. In a study of 51 cases with no evidence of infection and without urinary symptoms we found changes in 64.7%.

Hydronephrotic changes were found in 65.7% of cases of uterine fibroids; in 81.9% of cases of ovarian cysts; and in 25% of cases of uterine prolapse. The changes varied from small to extensive hydronephrotic changes, as well as unilateral or bilateral dilatation of the ureters with and without lateral displacement.

It is important to bear in mind the frequency of occurrence of hydronephrosis in pelvic disease since the presence of hydronephrosis predisposes to infection and may account for postoperative chills, fever, and pyuria.

In this study, we found the dilatation above the brim of the pelvis, as it occurs in pregnancy.

In cases of carcinoma of the cervix, obstruction to the ureters with hydronephrosis occurs in more than 70% of the cases, often interfering with renal function resulting in death due to renal failure.

Prostatic Obstruction And Hydronephrosis. — The occurrence of hydronephrosis in bladder neck obstruction has been recognized for many years.

In order to determine its frequency and extent, Squier and I reviewed the intravenous urograms in a series of cases of prostatic obstruction. In the first series (1933) to 1937,) the incidence of hydronephrosis was 44.44%. In the second series (1948) it was 33.43%. The degree of the hydronephrosis was less marked in the second series of cases. Definite changes in the course of the ureter were noted in some cases.

In many cases following removal of the obstruction, marked regression of the hydronephrosis was seen. In some cases there was only a slight improvement whereas in others there was no change at all. Failure of these changes to improve or completely disappear is due to irreversible changes in the wall of the ureter.

The incidence was much higher in carcinoma of the prostate, namely, 66.66% in the late cases and 44.66% in the early cases.

Infection in an unrecognized hydronephrosis may be the cause for post-operative chills and fever as well as for persistent pyuria.

Trauma And Hydronephrosis. — The role played by trauma in hydronephrosis in the patient who gives a history of injury while at work assumes great importance because of liability under Workmen's Compensation Acts. The history of a violent massage, sliding into third base during a ball game, a sharp blow on the abdomen, can not result in a hydronephrosis. If a diagnosis of hydronephrosis is made immediately after an injury, it is perfectly obvious that the trauma served only to focus attention upon a pre-existing hydronephrosis.

It may be more difficult to evaluate the role of a severe trauma sustained many years ago. If the trauma resulted in extravasation of urine with some infection which might result in peri-ureteral adhesions, the trauma may then be a factor in the hydronephrosis.

One form of trauma that is on the increase is injury to the ureter during various types of surgical operations. Immediate repair of the ureter should be done to prevent hydronephrosis.

Hydronephrosis may follow the use of radium and deep x-ray therapy due to excessive fibrosis following their use. Hence the need for great care in the use of these agents.

Hydronephrosis In Children. — Hydronephrosis in children is a relatively common condition. It is frequently overlooked because it runs a silent course, and the urinary symptoms are often overshadowed by the gastro-intestinal symptoms.

Many unrecognized cases of hydronephrosis enter the hospital late in the course of the disease and often in extremis. With the routine use of intravenous urograms, not only are many more cases being recognized but they are recognized early before irreparable damage to the kidneys has been done.

All too frequently children are treated for cystitis and pyelitis without relief and the hydronephrosis is overlooked. Recurring attacks of pyelitis and chronic pyuria should have a complete urological study.

Among some of the causes of hydronephrosis, other than stone, in children that were present in my experience are the following:

1. Median bar
2. Congenital valves in the prostatic urethra
3. Median bar and congenital valves
4. Ectopic ureter
5. Ectopic bladder
6. Ureterocele
7. Spina bifida
8. Stricture of the ureter
9. Ureter ending in a diverticulum

It is obvious that the common causes of hydronephrosis in children is mechanical, as it is in the adult.

Treatment. — With so many factors responsible for the hydronephrosis the first essential to correct treatment is an accurate diagnosis of the cause. Once the cause of the hydronephrosis has been established, the institution of the proper treatment becomes a simple matter.

Removal of the cause of the obstruction in the lower tract is all that is needed in this group of cases.

The conservative treatment of hydronephrosis due to lesions above the bladder are generally carried out by cystoscopic manipulation, dilatation and injection of oil for stone, simple dilatation for stricture and fulguration of cystic dilatation of the vesical end of the ureter.

At the present time there is a great tendency on the part of all urologists to practice conservative renal surgery, performing nephrectomy only as a last resort.

When the kidney is exposed a calculus which failed to cast a shadow, may be discovered. Peri-ureteral bands and adhesions may be found and their removal followed by a nephropexy may be all that is required. Ligation and division of an anomalous vessel is all that may be indicated. However, if the vessel is large and may interfere with the blood supply, division of the ureter and changing its position may be carried out.

The number and type of operations that have been used for the relief of uretero-pelvic obstruction are legion. The fact that so many operations have been devised is evidence that the perfect technique is not yet at hand. Many of them are more or less quite technical.

Two new recent operations have been advocated. Their simplicity has much to recommend them. The so-called Ramstedt technique, as used for pyloric obstruction, is simple and free of danger. I have used it several times. Not enough time has elapsed to evaluate its place in treatment. Recently division of the stricture has been renewed by Davis of Philadelphia, a technique suggested many years ago by L. L. MacArthur of Chicago. This, too, is a simple procedure, free of danger and it is to be hoped will fulfill the claims made for it by their sponsors. I have used it in several cases, but here again not enough time has elapsed for me to evaluate it.

Nephrectomy is the operation that has been carried out more frequently than any other due to the fact that there is nothing else to do. Some surgeons carry it out because they feel they are not qualified to undertake some of the plastic procedures.

If the patient has only one kidney and that fails to respond to cystoscopic treatment, such as uteral dilatation, so that the hydronephrosis is progressive and when the patient has recurring attacks of infection, it then becomes obvious

that the patient will have to be operated upon and the surgical problem then is no different than it is in a patient with two kidneys, only

insofar as the risk is greatly increased.

Pyeloplication and partial resection of the sac are indicated in moderately advanced cases.

Routine Photofluorography of the Chest

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Physicians specializing in pulmonary diseases for the past decade have repeatedly pointed out the inadequacy of the history and the physical examination alone as a basis for the diagnosis of chronic pulmonary diseases, particularly of tuberculosis¹. In the past phthisiologists, without the aid of roentgen examination, were frequently embarrassed by their inability to diagnose tuberculosis. As soon as equipment for x-ray examinations became widely available these specialists demanded increasing numbers of films before rendering a final opinion. It was only a matter of a few years until most of them insisted upon a chest film on every individual presenting himself for diagnosis and treatment. They were amazed at the amount of pulmonary disease, particularly tuberculous, which was found in spite of an essentially normal history and physical examination. It should be pointed out that many of these physicians were exceptionally well trained and experienced in the art of history-taking and physical diagnosis.

The natural outgrowth of this situation was that the chest specialists and roentgenologists began advocating x-ray examinations of the total population. Unfortunately the cost of this program was considered prohibitive and it seemed unlikely that such a plan could ever be

consummated. Consequently, these men, along with certain roentgenologists and engineers, became pioneers in the development of inexpensive methods of studying the chest roentgenologically².

One such method is the use of paper films.³ However, their interpretation is difficult for many men, their bulk is a real filing problem, and their cost is still too high. Fluoroscopy has its advocates⁴; its principal objections are the absence of a permanent record, and most physicians are of the opinion that small lesions may be missed. There is now available the photo-roentgen type of equipment, using 35 mm.,^{2b} 70 mm., the 4x5 inch⁵ single and stereoscopic films. Photo-roentgen equipment provides the desired rapid, convenient and inexpensive means of studying large masses of people. The technique has been perfected and the ability to interpret these films has improved. Careful check with large conventional films proves that these small films are excellent for survey studies.^{2b,6}

A review of the literature reveals approximately 275 articles on the value of routine roentgenologic study of the chest, most of them reporting use of miniature film technique. They are, almost without exception, unequivocally in favor of routine x-ray examination of the chest on everybody, sick or well. They indicate that the miniature film technique is highly satisfactory as to cost, speed, flexibility, filing, and, most important of all, reasonable accuracy of interpretation. A review of the available literature

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This work was aided by a grant from the Tuberculosis Institute of Chicago and Cook County.

TABLE 1
Tuberculin Testing Program

Age range	number tested	number positive	percent positive
12 - 88	1073	1028	95.8
Age distribution			
12 - 19	79	63	79.9
20 - 29	150	140	93.3
40 - 49	158	157	99.3
30 - 39	188	178	94.6
50 - 59	211	210	99.5
60 - 69	181	176	97.2
70 - 79	98	95	96.9
80 - 88	9	9	100.

also indicates that this method of taking chest films is well established. It surely will be a matter of only a few years before routine chest films will be made on all individuals presenting themselves to a clinic or hospital for care. More and more industries will install x-ray equipment, as will schools and universities. Thus, in the not too distant future, a chest film will be made on practically all individuals periodically. At least, such a program is conceivable and, in our opinion, can be made widely available. The main problem at hand is proving to all physicians that such a program is desirable. They must be convinced that a routine chest film is just as important as a routine urine or Wassermann test, and that it can be obtained at a minimum cost and with little inconvenience to their patients.

The purpose of our study was two-fold: first, to determine the present incidence of tuberculous infection and significant pulmonary disease in our clinic; second, to determine whether the taking of routine 4x5 inch stereoscopic chest films on all new adult admissions to our clinic was feasible and worth-while.

SURVEY OF 1044 CONSECUTIVE CLINIC PATIENTS STUDIED PHOTO-FLUOROGRAPHICALLY

The material for our survey consisted of 1044 consecutive new adult patients who were admitted to the Montgomery Ward Clinics of Northwestern University Medical School during a period which covered the first eight months of 1945. All of the survey group were tuberculin tested, old tuberculin being used in increasing strength up to a dilution of 1/100. The test was administered and interpreted by a nurse well trained in this procedure. At the time that the patient returned for interpretation of the

first tuberculin test, a 4x5 inch stereoscopic x-ray film was made. The films were interpreted independently by two of us (K.V.P. and J.A.M.) If either suspected any abnormal shadows, further x-ray studies were made, and the findings were reviewed by the third author (E.E.B.). Careful histories were taken, painstaking physical examinations were made, and routine lab-blood count, urinalysis and Kahn test, were carried out. Special x-ray studies and other tests were made when indicated in an effort to make an etiological diagnosis. Unfortunately some patients with obvious pulmonary disease were lost to the clinic or did not cooperate, and in some instances an autopsy was not obtained, thus preventing an absolutely certain diagnosis.

The tuberculin test was administered to 1073 patients. (Table 1). Of these, 1028 were sensitive to old tuberculin (95.8 per cent). This is a very high incidence of tuberculin sensitivity but it must be remembered that our group consisted of adults in the lower income bracket, from a large, crowded metropolitan area. The fact that dilutions of old tuberculin up to 1/100 were used and that no controls were made may also account for the high incidence of positive reactions. Our experience with tuberculin testing again emphasizes the limitations of the Mantoux test as a criterion in a screening program for tuberculosis in an urban survey of adults in the low income group.

In the survey of 1073 patients an x-ray study of the chest was accomplished in 1044. (Table 2) Abnormal pulmonary shadows were discovered in 107 instances, or 10.2 per cent. The films were studied very critically and if there was only a slight suggestion of an abnormal shadow, presumably first infection tuberculosis, or obvious heart disease. All of these 107 patients were studied by means of a single or stereoscopic 14x17 inch film, and by fluoroscope when indicated. Their histories and physical examinations were carefully reviewed. Those who cooperated were submitted to the following procedures when indicated: sedimentation rates, careful sputum examinations, gastric washings and guinea-pig inoculation, bronchoscopies with aspirations, and bronchograms. Among the 107 patients in whom abnormal pulmonary shadows were demonstrated, clinically significant lesions were found in 57 (5.4 per cent). The clinically sig-

TABLE 2
X-ray Study

	Number of Patients	Number Filmed	Abnormal Shadows		Clinically Significant	
			Number	Percent	Number	Percent
Routine Photofluorography Series	1044	1044	107	10.2	57	5.4
X-ray Study only when specially indicated	1044	364	38	3.6	25	2.39

nificant lesions (Table III) were diagnosed as follows: 8 cases of pulmonary tuberculosis with positive sputum (0.76 per cent of the series of 1044 patients); 20 cases of pulmonary tuberculosis of questionable activity (1.9 per cent); 5 cases of bronchiectasis; and 5 cases of carcinoma proved by biopsy or autopsy. In addition there were pneumonia, 2 cases; pleurisy of undetermined origin, 4; substernal thyroid, 1; pulmonary cyst, 1; silicosis, 1; bronchial stenosis of unknown origin, 1; and suspected Boeck's sarcoid, 1. Eight other patients had obvious pulmonary disease, but the exact etiology was not established, either because of lack of cooperation on the part of the patient or because an autopsy was not obtained.

The incidence of pulmonary and other intrathoracic disease revealed in our survey is compatible with the findings of other authors,⁷ when it is kept in mind that in our group all of the patients had complaints for which they sought medical advice.

When routine chest films are made on consecutive patients reporting to a medical clinic it may be difficult to be certain of the value of the routine procedure. The question arises whether recourse to roentgen examination only when specially indicated by history and physical findings might have not led to detection of pulmonary pathology in most instances. A comparable series of patients in whom chest x-ray examination was made only when deemed specially indicated was studied in an attempt to throw light on the value of routine examinations.

SURVEY OF 1044 CONSECUTIVE CLINIC PATIENTS WHO HAD CHEST FILMS ONLY WHEN SPECIALLY INDICATED

In this series of 1044 adult patients consecutively admitted to the clinic in the period just prior to the study reported above, chest films were made in 364 patients, or approximately one-third of the group. Abnormal shadows, exclusive of heart disease and of calcified pri-

TABLE 3
Breakdown of Clinically Significant Lesions

Diagnosis	Routine Photofluorography Series		X-ray Study only when specially indicated	
	1044 patients studied	1044 patients filmed	1044 patients studied	364 patients filmed
	Number of Cases	Percent of 1044	Number of Cases	Percent of 1044
Active tuberculosis with positive sputum	8	0.76	3	0.28
Tuberculosis, not active observation indicated	20	1.9	7	0.67
Bronchiectasis	5	0.47	6	0.57
Carcinoma	5	0.47	2	0.19
Other Lesions — (see text)	11	1.05	7	0.67
Pulmonary disease — etiology undetermined	8	0.76	0	0.00

mary tuberculous lesions, were found in 38 instances and of these, 25 were considered clinically significant (2.39 per cent of 1044 cases reviewed). (Table 2) Final diagnoses were: active tuberculosis with positive sputum, 3 (0.28 per cent); tuberculosis of questionable activity, 7 (0.67 per cent); bronchiectasis, 6; pleural effusion of undetermined etiology, 2; carcinoma, 2; silicosis, 2; and substernal thyroid, 2. (Table 3).

DISCUSSION

In the first series of patients (those examined photofluorography) 5.5 per cent revealed significant chest pathology. In the second and comparable series wherein about one-third of the patients had chest films made when specifically indicated, significant pathology was demonstrated in only 2.39 per cent of the cases. (Table 2) The breakdown of the clinically significant lesions in the two groups is summarized in Table 3. Both tuberculous and non-tuberculous lesions were found more than twice as often in the group of patients who were routinely examined roentgenographically. Bronchiectatic lesions were about equal in the two groups. This is not surprising when it is remembered that bronchiectasis has typical symptoms which usually lead to roentgenological study. While exact comparisons are impossible, the environment and social status of the patients in the two series were similar. The conclusion is, therefore, justified that routine roentgenological study of the chest in the second series might have demonstrated approximately twice as many significant lesions as were found.

The results of this study demonstrate the value of the routine roentgenological study of the chest. The photo-roentgen unit meets all requirements for such a program and our experience indicates that the 4x5 inch stereoscopic films are at least as accurate as the single 14x17 inch celluloid films.

As has been stated, the tuberculin test is of little value as a routine diagnostic procedure for adults living in a large, crowded urban center.

SUMMARY

In 1044 cases, routine roentgenological study of the chest revealed 5.5 per cent significant pulmonary lesions. In an equal and comparable group of patients who were studied roentgeno-

logically only when specifically indicated (364 cases) significant pulmonary lesions were demonstrated in only 2.39 per cent. The results of this survey support the view that roentgenologic study of the chest is an advisable routine procedure in health examinations, and a recommended procedure for all patients who seek medical care.

The incidence of a positive tuberculin test in 1073 consecutive adult clinic patients, using old tuberculin in strengths up to 1/100, was 95.8 per cent.

CONCLUSIONS

1. Routine roentgenological study of the chest proved to be of definite value in finding significant pulmonary tuberculosis and other pulmonary diseases in a series of 1044 patients.
2. The miniature photo-roentgen unit is an excellent technique for routine roentgenological study of the chest.
3. The tuberculin test was of little value as a "screening test" in our survey.

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A.M.A. PROVIDES \$25,000 TO SET UP CHRONIC ILLNESS COMMISSION

Carrying out another of the objectives of the American Medical Association's 12-point program for the advancement of medicine and public health, the Board of Trustees of the A.M.A. has made available \$25,000 to set up the Commission on Chronic Illness.

The sum, drawn from the A. M. A.'s national education campaign fund, was allotted to the Interim Commission on Chronic Illness, which will set up the permanent commission. The A.M.A. has also provided office space at its Chicago headquarters to the permanent commission, representing voluntary agencies, government agencies, and the public.

Purpose of the commission will be to promote programs for the control of chronic illness in every state.

The A.M.A. program listed "Provision of facilities for care and rehabilitation of the aged and those with chronic disease."

The patient with chronic illness is one of the major challenges to modern society. Sooner or later some form of long term illness affects one or more members in most families of the nation.

A conservative estimate suggests that more than one sixth of the population is afflicted with some chronic disease. Approximately 2,000,000 persons in the United States are chronic invalids at the present time, and the number is steadily increasing.

The commission is a joint project of the A.M.A., the American Hospital Association, the American Public Health Association, and the American Public Welfare Association, and was recommended by the Section on Chronic Disease of the National Health Assembly.

Dr. James R. Miller, Hartford, Conn., member of the Board of Trustees of the A.M.A., is chairman of the Interim Commission and will be a member of the permanent commission.

Other members of the Interim Commission, all of whom will be among the members of the permanent commission of approximately 30, are Dr. Thomas A. McGoldrick, Brooklyn, N. Y., representing the A.M.A.; Dr. Albert Snoke, New Haven, Conn., and J. Douglas Colman, executive director, Maryland Hospital Service, Baltimore, representing the A.H.A.; Dr. Dean W. Roberts, chief, Bureau of Medical Service, Maryland State Health Department, Baltimore, and Dr. Edward S. Rogers, of the Public Health School, University of California, Berkeley, representing the A.P.H.A.

Dr. Ellen C. Potter, Deputy Commissioner for Welfare, State Department of Institutions and Welfare, Trenton, N. J., and Judge Thomas S. J. Waxter, Domestic Relations Court, Philadelphia, will represent the A.P.W.A.

Mrs. Lucille M. Smith, of the Division of Public Health Methods, Public Health Service, Washington, D. C., representing the A.P.W.A. on the Joint Committee of the A.M.A., the A.H.A., the A.P.H.A., and the A.P.W.A., from which the Interim Commission developed, has been loaned by the Federal Security Agency to assist the Interim Commission as executive secretary in establishing the permanent commission.

This coordinated effort in the field of chronic illness is an excellent example of constructive cooperation between public and private agencies in answering one of the greatest and most acute of all social needs.

The permanent commission will include also representatives of the general public, education, churches, hospitals and medicine, agriculture, labor, management, public health, psychiatry, journalism, nutrition, and economics and sociology.

The Interim Commission has suggested the following objectives for the permanent commission:

1. To modify the attitude of society that chronic illness is hopeless; to substitute for the prevailing over-concentration on provision of institutional care a dynamic program designed to prevent chronic illness, to minimize its disabling effects, and to restore its victims to a socially useful and economically productive place in the community.

2. To clarify the problems arising from chronic illness among all age groups, with full realization of its social as well as its medical aspects.

3. To coordinate separate programs for specific diseases with a general program designed to meet more effectively needs which are common to all the chronically ill regardless of the cause or causes of their illness.

4. To clarify the inter-relationship of professional groups and agencies now working in the field.

5. To stimulate in every state and locality a well-rounded program for the prevention and control of chronic diseases and for the care and rehabilitation of the chronically ill.

Proposed activities of the permanent commission are:

1. To assemble existing data in order to evaluate and make use of all that is now available and to determine areas requiring further study.

2. To serve as a clearing house for information on laws, programs, experiments, and new developments; to keep all interested groups informed through a newsletter published regularly; and to publish special reports from time to time.

3. To stimulate the development of new methods and techniques in the organization and administration of services for the chronically ill.

4. To develop suggested patterns for integrated community programs.

5. To establish criteria for the appraisal of state and local chronic disease programs and facilities.

6. To give consultation to private and public state, regional, and local agencies interested in planning for the chronically ill.

7. To suggest a priorities for the determination of immediate as against long range needs for the guidance of state and local communities.

8. To explore methods of implementing the recommendations made by the commission.

9. To prepare a report to the American people outlining a comprehensive plan for the prevention and control of chronic disease and for the care and rehabilitation of the chronically ill.

PATHOLOGY CONFERENCES

EDWIN F. HIRSCH, DEPARTMENT EDITOR



Presentation of Three Cases

EDWIN F. HIRSCH, M.D.
St. Luke's Hospital
CHICAGO

BRONCHOGENIC CARCINOMA OF THE LUNG

A white female aged 56 years entered St. Luke's Hospital for the third time on March 27, 1948 and died on April 3, 1948.

Her first admission on September 22, 1947 was because of black and blue discolorations of the skin over the chest, cyanosis of the upper part of the body, difficulty in breathing and swallowing, and swelling of the face and hands. On August 30, 1947 she noticed black-blue marks on the chest. The next morning she had edema of the left side of the face and neck and distention of the superficial veins. A few days later her hands, chest, neck and head were swollen and cyanotic. She had difficulty with breathing after eating and occasionally was unable to swallow liquids. She was discharged on November 10, 1947 with a diagnosis of a mediastinal tumor causing superior vena cava obstruction (possible Hodgkin's disease or lymphosarcoma). During this hospital stay she received nitrogen mustard and roentgen ray

treatments and seemed to improve clinically. She was admitted for the second time on February 1, 1948 complaining of shortness of breath, and pain in the chest. She had gained 11 pounds in weight since leaving the hospital in November, 1947. On this admission she received another course of nitrogen mustard and radiation therapy, again with clinical improvement. She was discharged on March 6, 1948 and returned after twenty-one days because of general debility and severe abdominal pain.

On her first admission the striking feature was cyanosis of the trunk above the costal margin. The superficial veins of the chest were dilated, the neck was enlarged and the external jugular veins were prominent. The blood pressure was 130/75 mms. Hg., and the pulse rate was 84 beats per minute. The lungs were clear to palpation, percussion and auscultation except in the para vertebral region over the fifth and sixth ribs. Here the breath sounds were diminished and there was diminished resonance to percussion. The upper extremities were swollen, the



Figure 1. Photograph illustrating the granular lining of the right main bronchus in the region of the primary carcinoma. The pleura had scattered small grey nodules of metastatic carcinoma.

lower extremities not. When examined on February 1, 1948 there was marked engorgement of the veins in the neck and the posterior cervical glands were fixed and enlarged. Percussion revealed a wide superior mediastinal mass on the right and left sides. The right lower lobe was dull and the breath sounds were diminished in the right axillary line and over the front of the right side of the chest. A questionable mass was palpated to the right of the umbilicus. On her last admission the blood pressure was 126/72 mms. Hg., the pulse rate was 92 and the respirations were 24 per minute. There were a few rales in both lung bases posteriorly.

On the first admission the blood had 4,400,000 erythrocytes, 7,150 leucocytes per cmm. and there were 12.6 grams per cent of hemoglobin. The differential count was not unusual. The acid urine had a specific gravity of 1.027 and there were 150 mgms. percent of albumin. Roentgeno-

grams of the chest revealed a dense opacity in the right paravertebral zone which could be a so-called Pancoast's tumor. The lung field changes above the dense opacity were interpreted as a pleural effusion. Above this dense opacity and lateral to the tumor mass the lung tissues were hazy, perhaps an incomplete aeration. After the nitrogen mustard and roentgen ray treatments, the mass diminished 50 percent in size. The mass in the superior mediastinum was smaller and there seemed to be less fluid. Another roentgenogram on February 2, 1948 revealed an increase in the size of the mass in the thorax but the fluid had diminished. One on March 29, 1948 revealed a shift of the mediastinum to the right but had no evidence of nodular densities in the left lung.

The patient seemed to improve clinically after the first two courses of nitrogen mustard and roentgen ray treatments but the improvement was of short duration. She developed severe abdominal pain, became markedly apprehensive, disoriented, lethargic and expired on April 3, 1948. The clinical diagnosis was terminal malignancy.

The essentials of the anatomic diagnosis are:

- Primary bronchogenic carcinoma of the right lung;
- Carcinoma invasion of the superior vena cava, trachea, right parietal pleura, pericardial sac, visceral surface of the sternum and diaphragm;
- Metastatic carcinoma of the liver, pancreas, left kidney, the superior mesenteric vein, omentum, skin, and of the bronchial, supraclavicular, mediastinal, biliary, mes-



Figure 2. Photograph illustrating the metastatic carcinoma nodules of the liver.

enteric and periaortic abdominal lymph nodes;

Metastatic carcinoma stenosis of the right innominate, left common carotid and subclavian arteries, superior vena cava, innominate veins, pylorus of the stomach and first portion of the duodenum, common bile duct and pancreatic duct;

Atelectasis of the right lung;

Bilateral hydrothorax;

Acute fibrinous pericarditis;

Bronchopneumonia, hyperemia and edema of the left lung.

The right pleural space contained 800 ccs. of a clear yellow fluid, the left 600 ccs. The right lung was bound to the mediastinum and pericardium by carcinoma and fibrous tissues and in the anterior mediastinum were grey tumor tissues. A mass of these tissues in the region of the thymic body was 9 by 5 by 5 cms. but the cancerous tissues had not penetrated the pericardial sac. The tumor tissues compressed the large arteries and veins in the upper part of the chest; that is, the left common carotid, the left subclavian and the innominate arteries, the right and the left innominate veins and the superior vena cava. The lining of the pericardial sac and the epicardium were covered with a fibrinous exudate. The right parietal pleura was roughened by small nodules of grey tumor tissues, the left parietal pleura was smooth. The abdominal periaortic lymph nodes were large with tumor tissue and portions were necrotic. The right lung weighed 310 grams, the left 470 grams. The wall of the trachea beginning 6 cms. above the carina was distorted markedly by tumor tissues. This distortion continued through the right main bronchus (Figure 1), but only for a short length into the left. The lumen of the pulmonary artery was compressed by the tumor tissues. The pleura of the right lung was roughened by torn ends of fibrous tissues. The lung parenchyma was atelectatic and had scattered nodules of tumor tissues ranging to 2 cms. diam. the walls of the bronchioles were thickened by fibrous tissues. The pleura of the left lung was smooth. The lining of the main bronchus to within 1 cm. of the lung was thickened by tumor tissues. The parenchyma of the lower lobe was hyperemic, edematous and had focal regions of broncho-



Figure 3. Photograph illustrating the nodules of metastatic carcinoma of the kidney.

pneumonia; of the upper lobe it was hyperemic and subcrepitant. The heart had no changes of the valves and muscle tissues. The liver weighed 2360 grams and at least 50 percent was metastatic tumor tissue (Figure 2). The carcinoma tissues in the primary growth of the right bronchus and in the many metastases were alike in cellular structure. The tumor cells were small, had round or oval vesicular nuclei and only a small amount of granular cytoplasm. They were arranged in mosaics. Accordingly, in histologic structure they belong to the undifferentiated or small-celled form of bronchogenic carcinoma.

COMMENT

The initial clinical symptoms of the bronchogenic carcinoma in this patient were those associated with tumor compression of the large veins and arteries in the upper portion of the mediastinum. Doubtless even at that time, considerable growth of the tumor had occurred. Bronchogenic carcinoma can display in patients a wide range of clinical symptoms. In some patients these are related to the growth of cancerous tissues at the primary site, in others they are due to the metastases in remote structures such as bones or the brain. In this patient apparently the growth of tumor tissues at the primary site encroached upon the large blood vessels in the mediastinum, causing vascular stasis and impeded blood circulation. Small-celled bronchogenic carcinomas seem to grow rapidly and produce extensive metastases.

REGIONAL ENTERITIS

A white youth aged 19 years had bouts of abdominal distention, borborygmus, epigastric cramping pains, nausea and vomiting for three years. He had lost 20 pounds in weight in nine months. His symptoms began at the age of 16 years and the attacks of abdominal distress occurred at irregular intervals but averaged about one a month. They lasted as much as three days and terminated abruptly. About a month before entering St. Luke's Hospital to the service of Dr. R. Dolkart he had been examined in another hospital. The urine and blood examinations and other laboratory tests there were within the normal range, but roentgen examinations of the gastrointestinal tract disclosed partial obstruction of the distal portions of the small bowel with dilatation of the jejunum. He had had the usual childhood diseases and while the family history had certain items of interest, these had no important bearing on his illness.

The patient was poorly nourished, but alert and cooperative. His temperature, pulse and respirations were within the normal range. The abdomen was flat, not tender or rigid and the bowel sounds were active. At one time cord-like masses were felt in the upper right and left quadrants of the abdomen. Again chemical and morphologic studies of the blood and urine disclosed no unusual changes. Roentgen examinations of the small bowel, however, demonstrated constriction with proximal dilatation in the middle portions of the small bowel. On the third day in the hospital, Doctor Foster McMillan removed a long section of the small bowel from the lower portion of the jejunum and upper portion of the ileum. The bowel segment was about 75 cms. long, measured while attached to its mesentery. After the mesentery had been removed the bowel segment was opened along its antimesenteric edge. Thus extended, it was approximately 100 cms. long. (Figure 4).

The inside circumference at the proximal end was 9 cms. and this width extended for 30 cms. The lining of this segment of bowel had circular folds except 13 cms. beyond the level of amputation where it had a superficial smooth grey opacity 4 cms. in diameter with radiating margins. Abruptly the lumen of the bowel after the first 30 cms., was reduced to an inside



Figure 4. Photograph illustrating the changes in the bowel with regional enteritis.

circular folds and the surface had raised islets of hyperemic mucosa as large as 1 cm., between which were retracted bands of fibrous scar tissues. Beyond this constriction was a sacular dilatation for 9 cms. and the inside circumference here abruptly became 13 cms. Portions of the lining of this dilated segment had grey circular folds, but other portions had changes like those in the constriction. Then followed another segment about 35 cms. long with marked constriction of the lumen and thickening of the wall. The lining of this segment had lost its circular folds and had islets of hyperemic mucosa and grey pitted scar tissues between, like those mentioned in the first constriction. The inside circumference here was 2.5 cms. The proximal 15 cms. of the terminal 20 cms. of the total bowel removed had scattered superficial ulcers ranging to about 8 mms. in diameter. The inside circumference of the terminal segment was about 5 cms., the lining was grey, had circular folds, smaller than those at the proximal end. The mesenteric fat attached to the bowel was 10 cms. wide and ranged to 1 cm. in thickness. The portions along the bowel were indurated and thickened by hyperemic fibrous

diameter of 2 cms. and the wall was thickened to 1 cm. by fibrous and hypertrophied muscle tissues. This constriction of the lumen and thickening of the wall extended 5.5 cms. The lining of the constricted portion had lost its tissues. The moderately enlarged mesenteric lymph nodes had a maximum diameter of 2 cms. and were mainly grey hyperplastic tissues.

The microscopic examination of the tissues from the constricted portions had along the lumen edge a zone of fibrous tissues with inflammatory exudates which had replaced the mucosa. The muscularis was hypertrophied and had focal regions of chronic inflammation. In the subperitoneal regions were nodules of lymphoid tissue with germinal centers and some of these had lesions simulating tubercles and composed of epithelioid cells, fibroplastic stroma and a few Langhans giant cells. The mucosal tissues remaining had a wide tunica propria with a moderate to marked chronic inflammation characterized by exudates of lymphocytes, plasma cells, and polynuclear leucocytes, some with eosinophil granules. Granulation tissues at some levels extended through the muscularis and had foci of epithelioid cells. The lymph nodes had their basic tissues but also foci of large mononuclear phagocytes, like epithelioid cells, associated with an occasional giant cell.

The small ulcers in the lining in the portions not constricted had a loss of the tunica propria and the exposed submucosa was covered with granular tissue debris and leucocytes. The submucosa had a chronic inflammation similar, if not as marked, as the portions described. The mucosal tissues near the ulcers also had a chronic inflammation.

COMMENT

The bowel disorder described in this patient is an excellent example of regional enteritis. The disease begins as an ulcerative inflammation of the small bowel at various levels, commonly in the terminal portion of the ileum. The further progress of the illness is characterized by scar tissue and muscular hypertrophy thickening of the wall with constriction of the lumen in the portions involved. The lining is markedly changed so that the usual circular folds are gone and instead there are elevated islets of mucosa modified by chronic inflammation separated by retracted scar tissues. Later fistulae form which

extend between loops of bowel, into the mesentery or even into the abdominal wall or retroperitoneal structures. The disease occurs commonly in young adults. In some respects, portions of the tissue lesions simulate those of tuberculosis but as yet a causal relation with the tubercle bacillus has not been established. Surgical resection, where possible, gives the best results.

HEMORRHAGIC ALEUKEMIC MYELOGENOUS LEUKEMIA

A white male aged 61 years seemed to be in good health until one month before admission to St. Luke's Hospital when he first noticed many red blotches on his arms, legs and chest. Two weeks later his gums became swollen, tender and bled easily. A week before admission he noticed black tarry stools but had no abdominal discomfort or intestinal disturbances. He then noticed dyspnoea, weakness, dizziness and palpitation of the heart with exertion, and these became progressively worse. A small laceration of the hand failed to heal promptly. Two days before admission he had edema of the ankles. When admitted, his pulse was 90 and his respirations were 20 per minute, the temperature was 99.8°F. and his blood pressure was 140/70 mms. Hg. The skin over the chest, arms and legs had many ecchymoses 2.5 to 10 cms. in dia. and on the legs multiple punctate hemorrhages. His nose was swollen and red, the gums were spongy, bled easily about the teeth, and had a few foci of necrosis. The liver extended 3 cms. below the costal arch, the spleen was not palpable. The blood initially had 2,090,000 erythrocytes, later with transfusions 3,450,000 and 2,000 to 3,000 leucocytes per cmm. The hemoglobin ranged between 6.6 gms. to 9.4 gms. percent. The coagulation time was between 3 and 6.5 minutes, the bleeding time between 5 and 10 minutes. The percentages of the leucocytes were lymphocytes 33 to 47, monocytes 30 to 46, neutrophils 3 to 6, eosinophiles 1 to 2, basophils 0 to 1, metamyelocytes 1 to 2, myeloblasts 0 to 5, blast forms 4 to 10, promyelocytes 1 to 2, myelocytes 0 to 15. The red blood cells had anisocytosis and there were normoblasts, and erythroblasts. Sternal puncture disclosed the presence of myeloid cells, mainly blast forms and promyelocytes. The urine contained a large amount of albumin, no sugar, occasional casts



Figure 5. Photograph illustrating the petechial hemorrhages in the capsular surface and the extensive hemorrhages in the pelvis of the kidneys.

and erythrocytes. The patient complained of a severe headache and sore throat. He received six 500 ccs. whole blood transfusions during the first five days he was in the hospital. He continued to have gastro-intestinal tract hemorrhages. On the sixth day he could not move his left leg and arm, his eyes deviated to the right, he had difficulty in speaking and complained of a headache. He became comatose, had a series of convulsions, emesis of food and blood and died on the sixth day in the hospital.

The main portions of the anatomic diagnosis of the necropsy are:

- Large spontaneous hemorrhage with extensive laceration and intraventricular hemorrhage of the right frontal lobe of the cerebrum;

- Subarachnoid hemorrhage of the posterior portion of the right frontal lobe of the brain;

- Marked edema, hyperemia and petechial hemorrhages of the lungs;

- Extensive hemorrhage into the pelvis, ureters, and parenchymal tissues of both kidneys;

- Multiple petechial hemorrhages of the heart, lining of the air passages, stomach and bowel, the serous surfaces, the viscera and skin.

The body of this rather obese white man weighed 180 pounds and was 170 cms. long. The skin, mucous membranes, the serous surfaces and the viscera had many petechial and larger

hemorrhages. Each pleural space had 100 to 200 ccs. of a blood stained fluid. The marrow tissues of the sternum, ribs and vertebrae were tan grey. The lungs weighed 660 and 650 grams. The heart weighed 480 grams. There were no changes of the valves or muscle tissues except petechial hemorrhages in the latter and in the epicardium. The kidneys weighed 190 and 170 grams. They had a pale, slightly granular capsular surface with many petechial hemorrhages (Figure 5). The renal pelves and ureters were markedly hemorrhagic. The tan yellow liver weighed 2160 grams. It had many subcapsular petechial hemorrhages and the surfaces made by cutting had the usual lobular pattern and fatty changes. The spleen weighed 370 gms. The capsule was smooth and the deeper portions had a dark red friable tissue with fine trabeculae and indistinct Malpighian bodies. The lining of the stomach, the small and large bowel and the urinary bladder (Figure 6) had many submucous petechial hemorrhages.

The brain weighed 1340 grams with the upper half of the dura. The spinal fluid was stained with blood. Over the posterior and lateral sur-

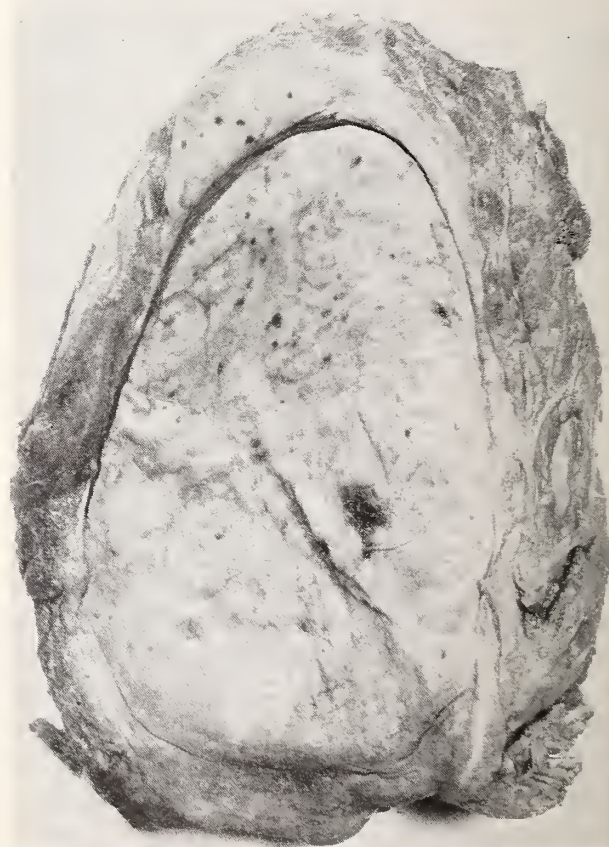


Figure 6. Photograph illustrating the petechial hemorrhages in the lining of the urinary bladder.

face of the right frontal lobe was a large subarachnoid hemorrhage and beneath this was an intracerebral hemorrhage with laceration of the tissues, 8 by 5 by 4 cms. The hemorrhage had ruptured into the right lateral ventricle. The cerebral arteries were not thickened. The other portions of the brain had no noteworthy changes.

Histological examinations of the liver, spleen and lymph nodes demonstrated myelogenous leukemia infiltrations of these viscera. The bone marrow tissues had a marked myelogenous leukemia hyperplasia. Accordingly, the hemor-

rhagic disease in the patient proved to be an aleukemic form of myelogenous leukemia.

COMMENT

Patients in the aleukemic phase of myelogenous leukemia may manifest the marked tendency to spontaneous hemorrhage which was observed in this patient. Despite many forms of medication including blood transfusions the hemorrhagic condition persists and death may occur unexpectedly from a spontaneous hemorrhage in the brain.

CAMPAIGN TO SPEED MEDICAL RESEARCH

Uniting in a simultaneous effort throughout the United States, 99 national scientific and civic organizations will seek to speed medical research through a campaign announced today by Dr. Anton J. Carlson, President of the National Society for Medical Research. The campaign, which is to be directed against research bans erected by the antivivisection cult, comes at a time when legislative battles on the "vivisection" question are raging in many states.

"The purpose of our national educational effort," Dr. Carlson stated in his announcement, "is to eliminate the paradoxical misunderstanding which makes some people support vast appropriations for medical research on one hand and oppose the work which is done with the money on the other hand.

"These people simply do not understand," Dr. Carlson explained, "that all medical science depends upon the study of living creatures—their body functions, their dysfunctions or diseases, and the effect of various treatments upon them. In other words, all of medical science is based upon 'vivisection,' which is defined by the anti-

vivisection cult as experimentation with living creatures.

"Persons can oppose the study of life for the purpose of learning how to protect life if they want to," Dr. Carlson stated, "but we would like to so clarify the issue that persons who really want medical research to continue are not working to defeat their own interests through misunderstanding."

Dr. Carlson explained that most national magazines, many advertisers, and several thousand clubs, associations, and colleges are cooperating in this attempt to clarify the meaning of the one word "vivisection" through a cooperative public educational effort to take place during the month of March.

Organizations cooperating in the attempt to clarify the vital role of experimentation in medical progress include: American Dental Association, American Diabetes Association, American Medical Association, American National Red Cross, American Public Health Association, American Veterinary Medical Association, Association of American Medical Colleges, National Research Council, National Foundation for Infantile Paralysis, National Science Teachers Association, and United States Junior Chamber of Commerce.

NEWS OF THE STATE



BOONE

Society Election.—Dr. Earl Davis was elected president at a recent meeting of the Boone County Medical Society, succeeding Dr. Gordon Kaske. Dr. Justin P. McCarthy was named vice president and Dr. Elmer D. James, secretary-treasurer.

CHAMPAIGN

Society News.—"Carcinoma of the Lung" was the theme of a program developed by Dr. C. H. Drenckhahn. Various aspects of diagnosis and treatment were discussed by Drs. Robert Hoyne, J. C. T. Rogers, Cesare Gianturco, Frederick Smith and James Walker.

COOK

Pediatric Course.—The Children's Division of the Cook County Hospital gave a two-week intensive general pediatric course beginning April 14 to April 16, under the auspices of the Graduate School of Cook County Hospital. Dr. A. Levinson is chief of staff of the Children's Division.

Grants for Research.—Three research grants in the amount of \$11,100 have been awarded to the University of Illinois College of Medicine by the Mallinckrodt Chemical Works, the Josiah Macy, Jr., Foundation, and Swift and Company.

The Mallinckrodt Chemical Works, St. Louis, Mo., has made a grant of \$4,000 for a pharmacological study of alkyl carbonates. The research will be conducted in the department of pharmacology, under the supervision of Dr. C. C. Pfeiffer.

The Josiah Macy, Jr., Foundation has forwarded a check in the amount of \$3,600, as final payment on a grant made in continued support of a study of carbohydrate metabolism in mental disease. The study is being conducted by Dr. Warren S. McCulloch, with the assistance of Drs. L. J. Meduna and Franz Alexander.

Swift and Company has renewed a grant in the amount of \$3,500 for a study of the assimilation and excretion of amino acids as related to nutrition. The experiments will continue to be conducted by Dr. Tilden Everson, under the supervision of Dr. Warren H. Cole in the department of surgery.

New Members of Crippled Children Advisory Committee.—Appointment of nine new members to the Professional Advisory Committee of the Division of Services for Crippled Children has been made by the University of Illinois Board of Trustees. The new committee members will serve terms of two years. Five of the appointees are from Chicago. They are: Ray Brown, superintendent of the University of Chicago Clinics; Dr. Francis J. Gerty and Dr. H. Worley Kendell, University of Illinois College of Medicine; Dr. Meyer A. Perlstein, pediatrician, and Miss Jane Bull, executive director of the Illinois Commission for Handicapped Children. Others who have been named are Isaac Jolles, State Department of Public Instruction, Springfield; Dr. Stuart Broadwell, Jr., Springfield otologist; Dr. Frederick H. Maurer, Peoria pediatrician; and Dr. Harold Westlake, director of the speech clinic at Northwestern University, Evanston.

The Board of Trustees also has re-appointed 21 others to the Committee. The Division of Services for Crippled Children is the official state agency established to provide medical, surgical, corrective, and other services and facilities for diagnosis, hospitalization, and after-care for children who are crippled or who are suffering from conditions which lead to crippling. The Professional Advisory Committee works with Dr. Herbert R. Kobes, director of the Division, in regard to the Division's operation. Matters concerning professional activities influencing the care of crippled children are

considered periodically. The Committee sets standards for professional personnel and facilities, and advises on policies which concern methods of providing care.

Dr. Kretschmer Gives Special Lectures in Oklahoma City.—Dr. Herman L. Kretschmer gave the first Charles B. Taylor lecture in urology in Oklahoma City, January 11. The lecture is to be given each year at the University of Oklahoma School of Medicine. On February 18 Dr. Kretschmer gave an operative clinic at the Jefferson Davis Hospital in Houston. He also gave a morning lecture before the students of Baylor University Medical School. In the evening, Dr. Kretschmer addressed the Houston Surgical Club and the Inter City Urology Society on "Problems in the Diagnosis and Treatment of Hydronephrosis."

Appointments at Illinois.—Dr. Milan V. Novak has been appointed assistant dean of the Graduate College for the University of Illinois' Chicago Professional Colleges.

Dr. Novak has been a member of the faculty of the University of Illinois College of Medicine since 1940. He will continue to serve as professor of bacteriology and head of the department.

Dr. Louis N. Ridenour of Urbana is the dean of the Graduate College. Dr. Novak will be in charge of administrative duties for the Graduate College on the campus of the Chicago Professional Colleges.

The new position has been created by the University because of the large increase in enrollment in graduate students working toward master of science and doctor of philosophy degrees, together with the need for expediting routine connected with this work.

There are now 121 students in the Graduate College who are working for advanced degrees in the three health professions, medicine, dentistry, and pharmacy. The number of students enrolled in graduate work on the Chicago campus has tripled since the close of the war.

General Health Education Conference.—"Motivating Health Education" was discussed by Dr. Iago Galdston, New York, at a health education conference at the LaSalle Hotel, Thursday, April 7. Dr. Galdston is executive secretary of the Committee on Medical Information, New York Academy of Medicine. The panel participants included Thomas Jones, director, department of illustration, University of Illinois Research and Educational Hospitals, "Exhibits and Films"; Ben Park, director, Radio Division of the Chicago Industrial Health Association, "Radio and Television"; Arthur Snider, science editor, Chicago Daily News, "Press" and T. Arthur Turner, managing editor, Medical Abstracts Service on "Publicity and Promotion Field." Cyril O. Houle, dean, University College of the University of Chicago, was chairman of the meeting and moderator of the panel. This health education conference was a pre-conference session

for the annual meeting of the Illinois Public Health Association, April 7-8, at the LaSalle Hotel.

Tuberculosis District Legal.—The Cook County Tuberculosis Sanitarium District, established more than a year ago by a vote in the area outside the city, is constitutional, according to Circuit Judge John Prystalski. The decision eliminated a taxpayer's suit asking a court order to keep its board from functioning.

Training in the Care of Children with Cleft Palate.—A program of instruction and clinical training in the care of cleft palate children for specialists in a variety of professions has been established by the University of Illinois, Dr. A. C. Ivy, vice-president in charge of the Chicago Professional Colleges, has announced.

All aspects of the care of children with cleft palates and lips will be included in the program.

The program will derive its primary financial support from funds provided by the Children's Bureau of the Federal Security Agency. The Children's Bureau has allocated \$175,000 for a period of from four to five years.

As part of the program, a special clinic for research, diagnosis, and follow-up of children with cleft lips and palates now is being set up in the University's Dentistry-Medicine-Pharmacy building at 1853 W. Polk St. Specialists in various professional fields will be able to see each child at a single clinic visit and determine the course of action which needs to be followed in each case.

The annual accrual of new cases in the state of Illinois is slightly over 200. Of that number, more than 100 are expected to receive care at the University of Illinois' Chicago Professional Colleges.

The new program will make possible a long-term follow-up and research in the value of various aspects of the care of cleft palate children. It also will be possible to evaluate systematically the progress of the children after any desired interval of time.

The program will be undertaken jointly by the University's Colleges of Medicine and Dentistry and its Division of Services for Crippled Children. Dr. Herbert Koepp-Baker, professor of audiology and director of speech and hearing rehabilitation in the College of Medicine, has been appointed director of the cleft palate training program.

"There has been a growing evidence over a number of years that there is an urgent need for persons qualified to care for children with cleft palates and cleft lips, in both public and private agencies," according to Dr. Koepp-Baker.

"It appears evident that the guidance of physical development, and social and emotional adjustment of these children requires integrated care on the part of specialists in a variety of professions," he said. "As a result, the University of Illinois has undertaken to coordinate and integrate a program of instruction and clinical training."

Phases of the integrated program will include case findings, diagnosis, hospital and home care

prior to, during, and after surgery, and the general supervision of physical and mental health, social adjustment, education, and vocational placement. Research pertaining to the improvement of training of specialists in the care of the total child suffering this deformity is another important feature of the program.

The instruction phase of the program is designed primarily for clinical training of speech pathologists and therapists, otolaryngologists, pediatricians, plastic surgeons, general dentists, orthodontists, prosthodontists, psychologists, and medical social workers. Applicants will be accepted from all over this country and abroad.

The entire program will receive its administrative direction from Dr. Ivy. The dental areas of the program will be supervised by Dr. Allan G. Brodie, dean of the College of Dentistry. Dr. John B. Youmans, dean of the College of Medicine, will guide the medical relationships, and Dr. Herbert R. Kobes, director of the Division of Services for Crippled Children, will advise on the field work that is to provide the case material and the practical experience.

Dr. Koepp Baker will be responsible for the total supervision of the clinical procedures of the Cleft Palate Training Center, as well as the didactic portions of the training. He also will coordinate both the research and educational aspects of the program.

Special Lectures.—The twenty-fifth Lewis Linn McArthur Lecture of the Frank Billings Foundation was delivered March 25 by Dr. Warren H. Cole, professor and chairman of the department of surgery, University of Illinois College of Medicine on "Current Trends in Diseases of the Gallbladder and Bile Ducts."—The eighth Edwin R. Kretschmer Memorial Lecture will be delivered at the Palmer House, Friday evening, April 29, by Dr. Maxwell M. Wintrobe, professor of medicine, University of Utah School of Medicine.

Personal.—Dr. C. O. Sappington was recently appointed executive officer of the Committee on Workmen's Compensation of the Council on Industrial Health, American Medical Association. Dr. Sappington will continue his work as private consultant in industrial health and editor of "Industrial Medicine."—Dr. Max Thorek addressed the Southeastern Section of the International College of Surgeons on "Hirschsprunger's Disease" in Miami, Fla., January 21.—Dr. N. O. Galloway has resigned as medical director of Provident Hospital, it is reported.—Dr. Herman L. Kretschmer, who headed a committee that was responsible for moving a fifty-one Pasteur Memorial monument to Convalescent Park opposite Cook County Hospital, was recently awarded the French Legion of Honor.—Dr. M. A. Perlstein participated in the annual course in physicians medicine at the University of Texas, March 2-5.—Dr. Raymond W. McNealy, associate professor of surgery, Northwestern Uni-

versity Medical School, addressed the Chicago chapter of International Society for General Semantics, March 11, at Thorne Hall, on "Doctors, Patients and General Semantics." Dr. McNealy also addressed the Hollywood Academy of Medicine, Hollywood, Calif., April 14, on "Peripheral Vascular Surgery."—Dr. Edward F. Dombrowski has been appointed superintendent of the Chicago State Hospital, succeeding Dr. Joseph Drabanski who held the position for eight years.

Society News.—Dr. Francis E. Senear, professor and head of the department of dermatology, University of Illinois College of Medicine, was recently elected president of the American Academy of Dermatology and Syphilology, succeeding Dr. Clyde L. Cumner, Cleveland.—Dr. Samuel M. Feinberg addressed the annual joint meeting of the Cleveland Allergy Society and the Cleveland Academy of Medicine, March 3, on "Present Status of the Anti-Histaminic Drugs.

FORD

New Officers.—The Ford County Medical Society recently elected Dr. R. L. Kenward, Melvin, as its president. Dr. M. D. E. Peterson was elected vice president and Dr. G. M. Noble, secretary-treasurer.

GREENE

Dr. Garrison Observes Eightieth Birthday.—Dr. William H. Garrison, White Hall, observed his eightieth birthday, January 23. Dr. Garrison took a degree in pharmacy before he graduated at Missouri Medical College, St. Louis, in 1897. He has been practicing in White Hall since 1920. In 1947 he was received into the Fifty Year Club. A former president and vice president of the Green County Medical Society, Dr. Garrison also served for twenty years as secretary.

IROQUOIS

Iroquois Staff Election.—Dr. J. M. Robarts, Watseka, was elected president of the Iroquois Hospital medical staff recently, succeeding Dr. C. H. Dowsett, Watseka. Other new officers are Dr. R. A. Buckner, Gilman, vice president and Dr. R. F. Donovan, Watseka, secretary.

Personal.—Dr. W. F. Buckner was recently engaged by the local board of supervisors as physician of Iroquois county succeeding Dr. R. D. Short, who resigned.

JEFFERSON

New Staff Officers.—Dr. C. M. Dixon was elected president of the Good Samaritan Hospital staff at the recent annual meeting of the hospital's physicians succeeding Dr. H. G. Thompson. Dr. C. K. Wells was named vice president and Dr. Leo Eschelbacher, secretary-treasurer.

KANE

Society Election.—The Kane County Medical Society recently elected Dr. A. L. Morley, Batavia, as president; Dr. Frederick A. Schurmeier, Elgin, vice president; and Dr. A. J. Zmugg, Aurora,

secretary-treasurer. Dr. Morley succeeds Dr. C. O. Heimdal, Aurora.

LAKE

Personal.—Dr. Franklin Patterson observed his eightieth birthday February 5.

LA SALLE

Dr. Bartoli Goes to California.—Dr. A. J. Bartoli, LaSalle, left early in February for Los Angeles where he plans to engage in practice. His practice is being taken over by Dr. James Aplington, LaSalle. Dr. Bartoli was recently secretary of the LaSalle County Medical Society.

MC HENRY

Hospital Staff Election.—Dr. J. F. Harris, Richmond, was elected president of the medical staff of Woodstock Public Hospital at the annual meeting of the board held recently. Other chosen officers are as follows: Dr. T. F. Forrest, Woodstock, vice president; and Dr. J. H. Goodlad, Harvard, secretary-treasurer.

Memorial to Physician.—Friends of Dr. Grant Royce, former Harvard physician who died at Sparland recently, plan to establish a memorial gift fund in honor of the doctor to purchase a chair, bed or other equipment that is needed at the Harvard Community Hospital. The funds received will be donated to the women's auxiliary of the hospital which has a special department handling donations of this kind. Any person wishing to contribute to the Dr. Royce Memorial Fund may leave donations at Davidson's Drug Store, 38 North Ayer, Harvard.

Society Election.—Dr. C. E. Wittenberg was elected president of the McHenry County Medical Society at a recent meeting. Other officers elected are Dr. J. H. Goodlad, vice president and Dr. B. B. Neuchiller, secretary-treasurer.

PEORIA

Society News.—The Peoria Medical Society was recently addressed by Dr. Benjamin Spock, a staff member of Rochester Child Health Institute, on "The School Age Child."

ROCK ISLAND

New Staff Officers.—Dr. Frederick L. Eihl was elected president of the Moline Lutheran Hospital medical staff at the annual meeting of the staff recently. He succeeds Dr. P. P. Youngberg. Other officers named were Dr. George W. Koivun, vice president and Dr. Elliott F. Parker, secretary-treasurer. Members of the executive committee for the hospital, all to serve one year, are Dr. F. J. Otis, Dr. D. B. Freeman and Dr. Youngberg.

Society News.—Dr. Mayo Soley, professor of internal medicine and dean of the State University of Iowa College of Medicine, Iowa City, addressed the Rock Island County Medical Society at St. Anthony's Hospital, Rock Island, on "Newer Concepts in the Treatment of Thyroid Disease," March 8.

STEPHENSON

Society Election.—The Stephenson County Medical at its recent annual meeting elected Dr. L. F. Rockey as president, succeeding Dr. F. X. Graff. Other newly elected officers are Dr. V. V. Rockey, vice president and Dr. J. S. Clark Jr., secretary-treasurer. Dr. Graff was named as delegate to the Illinois State Medical Society.

WAYNE

New Officers.—Dr. D. A. Gershenson was chosen president of the Wayne County Medical Society recently to succeed Dr. L. W. Young. Other officers of the society are Dr. Donald B. Frankel, vice president and Dr. G. R. Hill, secretary.

WHITE

Society Election.—The White County Medical Society at a meeting February 20 reelected the following officers: Dr. J. G. Harrell, president; Dr. John A. Legier, vice-president; Dr. R. S. Loewenherz, secretary-treasurer and Dr. R. C. Brown, delegate to the Illinois State Medical Society.

WINNEBAGO

Honor Years of Practice.—Dr. Sanford S. Catlin, physician and surgeon who made his first visits to Rockford patients on a bicycle, was recently honored at a testimonial dinner at the Lafayette Hotel. Dr. E. H. Weld, past president of the Illinois State Medical Society, presented to Dr. Catlin the insignia indicating his membership in the Fifty Year Club of the Society.

GENERAL

Welfare Department Statistics.—The resident population in all institutions of the Department of Public Welfare January 31, 1949, was 47,958—an increase of 1,384 over January 31, 1948. On the books of all institutions, including those present, in family care, on conditional discharge and other absentees, were 54,294. The greatest increase over January of last year was in the nine hospitals for the mentally ill, in which the population rose 1,324. There were 1,153 admissions, 699 discharges and 318 deaths during the month. In the hospitals were 34,834 patients, and a total of 38,446 on the books. The institutions for the mentally defective: Dixon State Hospital and Lincoln State School and Colony showed an increase of 161 over the previous year. The resident population was 9,312 with 10,602 on the books. There were 346 in Security Hospital. At Neuropsychiatric Institute, where most admissions are temporary for special treatment, 70 patients were present at the month's end. Clinics for trachoma control and prevention of blindness in Southern Illinois treated 192 patients for trachoma, 49 for glaucoma, and 364 for other eye ailments. Nine were hospitalized for operations. The Illinois Eye and Ear Infirmary received 7,498 persons, listed 20,482 treatments in January and 415 persons were admitted to the hospital. The Chicago Community Clinic reported 664 interviews. Of this number 648

were former State Hospital patients, 255 at Elgin and 251 at Manteno. The Boys' Training School, Girls' Training School and Women's Reformatory reported 887 juvenile delinquents, felons and misdemeanants present January 31, 1949, a decrease of 69 as compared to one year ago. There were 667 juvenile delinquents present at the close of the month as compared to 730 a year earlier.

Council on Social Agencies Changes Name.—The Chicago Council of Social Agencies has changed its name to "Welfare Council of Metropolitan Chicago," in order to match the name of the organization with the scope of its work, Wilfred S. Reynolds, director of the Welfare Planning Agency, announced recently. He explained that "welfare planning can best be accomplished through participation in a central body which provides representation from a broader area of interest than just organized welfare services, such as civic, business, industrial, labor, educational, governmental and physical planning agencies." The new name, he said, more accurately describes what the central body has come to be. Meyer Kestnbaum, president of Hart, Schaffner & Marx, was re-elected president of the council. This will be his fifth annual term. J. Beach Clow and Frank J. Woods Jr., were elected vice presidents, Mrs. William M. Collins Jr., re-named secretary and I. S. Loewenberg, treasurer.

Urge Increased Health Facilities.—Pointing out that it is "common knowledge that great parts of Illinois are without adequate health facilities and that most counties of the state are without local health departments worthy of the name," the Health Division of the Chicago Council of Social Agencies has appealed to Governor Stevenson and the Illinois General Assembly to appropriate additional state funds to "meet this great unmet need."

The division's report asks that the state set up a health program "to enable the development of health services to which the people are entitled," and asks specifically that the state eventually provide for the matching of local funds for public health work by the state "on a dollar for dollar basis." This would amount to about \$4,500,000 annually.

It was emphasized that adequate health protection for the people of Illinois can only be attained through local health departments. "There are more than 2,500,000 people in the state without proper health protection because they are dependent on the state health department, which is not equipped to do the thorough job necessary," it was said.

The Illinois Department of Public Health has available annually about \$4,700,000. Of this amount, about \$2,000,000 is from federal sources and the balance is appropriated from state funds.

Of the \$4,700,000, about \$530,000 is earmarked for distribution by the state to local health departments as grants-in-aid, that is money intended to supplement local funds for health services. "The

\$530,000 annually given to local health departments is woefully inadequate," says the health division.

The Chicago Board of Health receives no state funds, but has been allotted \$543,160 in federal funds through the State Health Department to be used for mental hygiene and tuberculosis and venereal disease control. The Cook County Health Department is receiving \$118,657 from the state, and the Evanston Health Department is receiving \$34,236 from the state.

Chicago alone stands to benefit immeasurably if it could receive financial aid from the state, the division reported. Quoting the Chicago-Cook County Health Survey made by the U. S. Public Health experts, the division says, in its appeal to the state, that the glaring deficiencies in health protection for the city consist of "Virtually no health services for the nearly 750,000 school children in the city; no health supervision for preschool age children in at least 80 per cent of the city; the need of 100 additional sanitary inspectors to relieve the grossly inadequate sanitation and sanitary inspection services; the urgent need of 250 public health nurses, and virtually no public health programs to conserve the health of the people through health education, nutrition education, mental hygiene and health services for the aged. State relief is essential for the correction of these deficiencies."

It was also pointed out the State and Territorial Health Officers Association, which is broadly representative of public health work, has recommended that Congress set up a plan under which local public health work would be financed with one-third federal, one-third state and one-third local funds.

California and New York provide grants-in-aid for local health work on a much more liberal basis than Illinois, it was said. California distributes \$3,000,000 annually and New York provides at least 50 per cent of the funds for local public health work and in poorer communities up to 75 per cent.

National Mental Health Week.—The Illinois State Medical Society is one of the groups conducting Mental Health Week in Illinois, April 24 to 30, as part of a nationwide observance sponsored by the U. S. Junior Chamber of Commerce. Illinois plans are in the hands of the Mental Health Advisory Committee of the Illinois Department of Public Health.

Dr. Oscar Hawkinson is representing the Medical Society on the Advisory Committee, which includes members from the Illinois Society for Mental Hygiene, Illinois Department of Public Welfare, U. S. Public Health Service, Illinois Psychiatric Society and Cook County Department of Public Health. Dr. Rudolph G. Novick, M.D., Medical Director of the Illinois Society for Mental Hygiene, is chairman of Mental Health Week in Illinois.

Aims of the week are to present the facts about mental health and illness and to stimulate formation

or expansion of local groups working the year 'round on mental health projects.

Events will include presentation of a National Mental Health Award by Governor Stevenson to Mrs. Zella Bauer, who has been selected for her outstanding work as a hospital attendant at the Chicago State Hospital, and open house events at the state hospitals for the mentally ill.

Statewide newspaper, magazine and radio publicity will carry the mental health message and give impetus to publicity efforts on the part of social agencies, health service groups, and other organizations which are being asked to develop their own programs during Mental Health Week. Posters will be made available to libraries, which will be furnished with reading and pamphlet lists and be urged to exhibit mental health books at the same time.

A good portion of the informational material will stress the answer to the question of the lay person: "What can I do?" The reply is:

1. Join the Illinois Society for Mental Hygiene, one of its affiliates, or form a local mental hygiene society with representatives from civic, health, religious, and welfare organizations of your community.

2. Discuss with community leaders how the provisions of the Mental Health Act, administered by the Illinois Department of Public Health, can be used in developing your local program.

3. Cooperate with the Illinois Department of Public Welfare by learning what it does now in your community, and working with it to solve mental health problems as they arise.

4. Cooperate with the Illinois State Medical Society and the Illinois Psychiatric Society in their educational campaigns which substitute sound, scientific facts for fears and misconceptions about mental illness.

DEATHS

SUSAN KATHERINE ACKERMANN, Chicago, who graduated at Chicago College of Medicine and Surgery in 1912, died February 14, aged 78, following injuries suffered in a fall in her home. She had practiced medicine in Chicago for 35 years and was an honorary member of the Norwegian-American Hospital Society.

LEO AWOTIN, retired, Chicago, who graduated at Indiana University School of Medicine in 1916, died February 11, aged 73.

HENRY LESTER BAKER, Chicago, who graduated at the University of Illinois College of Medicine in 1898, died March 5, aged 79. He had practiced on Chicago's west side over 50 years.

ALBERT J. BENNETT, Chicago, who graduated at National Medical University, Chicago, in 1902, died February 16, aged 76.

ROBERT GRAY BOND, Chicago, who graduated at St. Louis College of Physicians and Surgeons in 1909, died February 27, aged 70, at the home of his son in San Diego, California.

CHARLES JOHN CARLIN, Joliet, who graduated at the Hahnemann Medical College and Hospital, Chicago, in 1912, died February 23, aged 60, following a heart attack. He was a past president of his county medical society, former president of the county tuberculosis sanatorium and at one time head physician at Stateville.

HERMON HARRISON COLE, Springfield, who graduated at the University of Michigan Medical School in 1917, died suddenly, February 16, aged 56. He had been active in organizing the Sangamon County Tuberculosis Association, was a past president of his county medical society and a vice-president of the Illinois State Medical Society.

MURRAY SAYLE DUMONT, Mount Morris, who graduated at University of Illinois College of Medicine in 1933, died February 28, aged 42. He was a member of the Rockford Memorial hospital staff.

ARTHUR ALFRED FUHLBRIGGE, Des Plaines, who graduated at University of Nebraska College of Medicine in 1931, died suddenly, February 21, aged 49. He was on the staff of the Des Plaines Health Board.

JOHN GEORGE HENSON, Huntley, who graduated at Chicago College of Medicine and Surgery in 1908, died February 27, aged 65.

HAROLD STACEY HULBERT, Aurora, who graduated at University of Michigan Medical School, Ann Arbor, in 1914, died suddenly, February 16, aged 60. From 1922-1929, he was associate in neurology at the University of Illinois College of Medicine; from 1929 to the time of his death he was psychiatrist for Child Guidance Mental Hygiene Clinic, Public Schools of Gary and East Chicago.

LEROY JONES, Hoopeston, who graduated at Missouri Medical College, St. Louis, in 1888, died January 30, aged 81. He had practiced medicine in the Hoopeston area for 50 years and was the City Medical Officer for many years.

GROVER CLEVELAND KLEIN, Galesburg, who graduated at Rush Medical College in 1912, died suddenly, January 30, aged 65. He was a member of the Central Illinois Society of Ophthalmology and Otolaryngology and on the staff of Galesburg Cottage Hospital.

NORBERT M. J. LATZ, Chicago, who graduated at Loyola University School of Medicine in 1931, died, February 9, aged 41. He was a staff member of St. Joseph's, St. Elizabeth's and Alexian Brothers Hospitals.

ALBERT T. LUNDGREN, Chicago, who graduated at Rush Medical College in 1907, died January 23, aged 71. He had practiced medicine in Chicago for 41 years and was a staff member of Augustana Hospital.

JAMES HENRY RIFFEY, formerly of Girard, who graduated at St. Louis University School of Medicine in 1903, died in Colorado, February 18, aged 69. He had practiced medicine in Girard for many years and was mayor for some time.

JOHN FREDERICK S. ROST, Minier, who graduated at the University of Illinois College of Medicine in 1906, died February 7, aged 66.

GRANT E. ROYCE, Harvard, who graduated at Northwestern University Medical School in 1927, died February 3, aged 45.

LOUIS RUDOLPH, Chicago, who graduated at Northwestern University Medical School in 1911, died January 30 in Wesley Memorial Hospital, aged 63. He was attending obstetrician at Mt. Sinai and Cook County Hospitals.

HARRY WILLIAM SCHUMACHER, Altamont, who graduated at Washington University School of Medicine in 1917, died February 16, aged 59. He had practiced medicine in Altamont for 27 years.

WILLIAM HENRY STACKABLE, Chicago, who graduated at University of Michigan Medical School, Ann

Arbor, in 1903, died suddenly, February 8, aged 75.

SAMUEL CECIL STANTON, retired, Chicago, who graduated at Northwestern University Medical School in 1892, died January 26, aged 92. He served in the medical corps in the Spanish American War and World War I, after which he was retired with the rank of brigadier general. He was the oldest Legionaire of America and a member of Hinsdale Post 250 of which he was the chaplain.

EDWIN LUTHER STEVENS, Bartlett, who graduated at Northwestern University Medical School in 1892, died aged 79, at Penney Farms, Florida, of coronary thrombosis.

“For The Common Good”

Health Education on Television Meets Popular Interest.—A new approach was used in the telecast over WGN-TV, March 10, when Dr. John T. Reynolds, clinical assistant professor of surgery, University of Illinois College of Medicine, and Dr. Theodore R. Van Dellen, Medical Editor of the Chicago Tribune and associate professor of medicine, Northwestern University Medical School, answered the question “What Is Appendicitis?” Dr. Don L. Grieme was a principal in the story as a physician-patient. He described his own symptoms, reactions and results in his recovery from an acute appendicitis. Dr. Reynolds drew diagrams on the program and Dr. Grieme, with the assistance of Dr. Van Dellen, demonstrated procedures in taking a blood count and explained certain instruments in surgical procedures. For the first time in the weekly series, a telephone call received during the program was answered immediately. The query was “Does the Appendix Regrow”.

The program was the eleventh in a weekly series developed by the Educational Committee of the Illinois State Medical Society in cooperation with WGN-TV. As this issue of the Illinois Medical Journal went to press, other programs planned are:

Fremont A. Chandler, March 17, What is Polio?

Edward A. Pizczek, March 24, Self-Medication is Dangerous.

Herbert E. Schmitz, March 31, Maybe It Isn't Cancer.

Frederick W. Merrifield, April 7, If It's Cleft Palate.

John L. Keeley, April 14, Understanding the Gallbladder.

David Slight, April 21, Mental Health.

Robert G. Kesel, D.D.S., and Donald Kerr, D.D.S., April 28, Oral Hygiene.

Dr. Van Dellen appears in all programs and demonstrates successfully the importance of a physician-moderator on the telecast. His personal experience lends confidence to the physician appearing on television for the first time and bridges any breaks that may occur. Cosmo Genovese, program producer on all the medical programs, provides such excellent direction that the Educational Committee programs are now well out of the amateur class.

Television Aftermath: A patient who saw the heart program with Dr. Van Dellen and Dr. Chauncey Maher asked his family physician to refer him to the latter. In answer to Dr. Maher's query why he wanted him instead of Dr. Van Dellen, the patient replied: Well, you see, Dr. Van Dellen's hair was in perfect place, his tie knot perfect, and his suit was unwrinkled. On the other hand, your hair was mussed, your tie was awry and your suit was all wrinkled. You looked like a sound general practitioner and that's what I wanted.

Lectures Arranged Through the Educational Committee of the Illinois State Medical Society; Charles P. Blair, Monmouth, Chairman; Warren W. Furey, Chicago, Vice Chairman:

Dr. M. Murray Nierman, Calumet, Film on Human Reproduction for the Calumet City Lions Club, February 22.

Percy E. Hopkins, Chicago, Bryn Mawr Women's Club, February 28, in Chicago, on National Compulsory Sickness Insurance.

Chester Coggeshall, Chicago, South Shore Branch Library, March 3, on The Story of Diabetes.

Marie Wessels, Chicago, McGill Residence in Chicago, April 5, film on Human Reproduction.

Walter Stevenson, Quincy, Community Women of Du Quoin, April 7, on Socialized Medicine.

Carroll Stuart, Chicago, Marshall High School PTA, May 2, Cancer.

Leo Kaplan, Jewish Community Centers of Chicago, May 15, on Growing Old Gracefully.

Lectures Arranged Through the Scientific Service Committee of the Illinois State Medical Society; Robert S. Berghoff, Chicago, Chairman; Louis R. Limarzi, Chicago, Vice Chairman:

Peter Rosi, Chicago, Sangamon County Medical Society in Springfield, March 3, Management and Treatment of Gastric and Duodenal Ulcers.

Eugene A. Hamilton, Chicago, St. Clair County Medical Society in East St. Louis, March 3, on Compound Fracture as an Emergency — Treatment and Care.

Eugene A. Hamilton, Bureau County Medical Society in Princeton, March 8, on Fractures.

H. W. Wellmerling, Bloomington, La Salle County Medical Society in La Salle, March 10, Fractures, illustrated.

Carl V. Moore, St. Louis, Macon County Medical Society in Decatur, March 15, on Hematology.

Hugh M. Flack, Chicago, McHenry County Medical Society, March 17, in Crystal Lake, on Angina Pectoris and Coronary Thrombosis.

John Huffman, Chicago, Effingham County Medical Society, March 17, on Office Gynecology.

Robert C. Levy, Chicago, Whiteside and Lee Counties Medical Society, March 24, on Diabetes.

Warren H. Cole, Chicago, Peoria Medical Society in Peoria, March 29, Nationalization of Medicine.

Ladislav J. Meduna, Chicago, Sangamon County Medical Society in Springfield, April 7, on Psychosomatic Medicine.

Lee T. Hoyt, Roseville, St. Clair County Medical Society in East St. Louis, on Soil Deficiency as a Causative Factor in Disease.

John Van Prohaska, Chicago, La Salle County Medical Society in La Salle, April 14, on Surgical Management of Carcinoma of the Large Bowel.

Charles D. Krause, Chicago, Iroquois County Medical Society in Watseka, April 19, on Eclampsia.

Henry Buxbaum, Chicago, Macon County Medical Society in Decatur, April 19, on Common Obstetrical Problems.

Ben Z. Rappaport, Chicago, Effingham County Medical Society in Effingham, April 21, on Allergy with Particular Reference to Histamine.

Charles Newberger, Chicago, Bureau County Medical Society in Princeton, May 10, on "A Review of the Obstetric Activities in Bureau County."

Frank G. Dickenson, Ph.D., director, Bureau of Medical Economic Research, Northwest Branch, American Academy of General Practice, March 18, on Cost of Medical Care.

Danely P. Slaughter, Chicago, La Salle County Medical Society in La Salle, May 12, on Newer Methods and Treatment of Cancer.

P. H. McNulty, Chicago, Will-Grundy Medical Society in Joliet, May 12, on How to Manage a Patient with Benign or Malignant Prostatitis.

Frederick Slobe, Chicago, Kankakee County Medical Society in Kankakee, May 13, on Trends in Industrial Practice.

Norris J. Heckel, Chicago, Macon County Medical Society, May 17, in Decatur, on Endocrine Therapy of Diseases of the Genito-Urinary System.

I. Pat Bronstein, Chicago, Effingham County Medical Society in Effingham, May 19, on Recent Experience with Pediatric Endocrinopathies.

A. R. K. Matthews, Chicago, DeKalb County Medical Society in DeKalb, May 24, on Renal and Hepatic Function Tests.

Leo P. A. Sweeney, Chicago, Will-Grundy County Medical Society in Joliet, May 26, on Eye Conditions as Seen by the General Practitioner.

Mr. J. W. Holloway Jr., director, Bureau of Legal Medicine and Legislation, American Medical Association, McDonough County Medical Society, in Bushnell, May 27, on Legal Medicine and the Profession.

Postgraduate Conferences Arranged Through the Postgraduate Education Committee of the Illinois State Medical Society; Robert S. Berghoff, Chairman; George Hellmuth, Vice Chairman:

Tenth District, including the counties of Alexander, Jackson, Monroe, Perry, Pulaski, Randolph, St. Clair, Union and Washington at the Elks Club, Du Quoin, April 7, with Dr. G. C. Otrich, Belleville, Councilor, presiding. Participants were:

Kilian F. Fritsch, East St. Louis, Rehabilitation of the Victim of Poliomyelitis.

Edward H. Reinhard, St. Louis, Diagnosis and Treatment of Hemorrhagic Disorders.

G. Lynn Krause, St. Louis, Diagnosis and Surgical Treatment of Poppy in the Large Intestine in Infants and Children.

Willard O. Thompson, Chicago, Diseases of the Adrenals.

Harry M. Hedge, Chicago, Birthmarks.

In the evening, Dr. Walter Stevenson, Quincy, President-Elect of the Illinois State Medical Society, gave some official remarks on the national picture and discussed Crossed Eyes — a Medical and Economic Problem."

Sixth District, including counties of Adams, Brown, Calhoun, Cass, Greene, Jersey, Macoupin, Madison, Morgan, Pike and Scott, at the Lincoln-Douglas Hotel, Quincy, April 14, with F. Garm Norbury, Jacksonville, Councilor for the District, presiding. Speakers were:

Harry Hedge, Chicago, Birthmarks.

Eugene Hamilton, Treatment of Fractures by the General Practitioner.

Warren Cole, Chicago, Intestinal Obstruction.

Arthur Atkinson, Chicago, Medical Management of Peptic Ulcers.

Percy Hopkins, Chicago, Remarks as President and Acute Abdominal Emergencies.

In the evening Dr. Harold M. Camp spoke as Secretary of the State Medical Society, and Charles H. Meredith, Secretary, Industrial Association of Quincy, gave the principal address, entitled "What Is Actually Going on in Washington."

Eighth District, including the counties of Champaign, Clark, Coles, Crawford, Cumberland, Douglas, Edgar, Jasper, Lawrence, Richland and Vermilion at the Wolford Hotel in Danville, April 21, with Harlan English, Danville Councilor of the District, presiding. Participants were:

Don Sutton, Chicago, Use of Anticoagulants in Vascular Disease.

Leonard Weber, Chicago, Contact Dermatitis (Eczema).

Michael Streicher, Chicago, Constipation: Clinical Application in Its Management.

Frederick A. Jostes, St. Louis, Some Aspects of the Diagnosis and Treatment of Low Back Pain.

In the evening Dr. Eric Oldberg, Chicago, spoke

on "Diagnosis and Treatment of Head Injuries."

Second District, including counties of Bureau, La Salle, Lee, Livingston, Marshall, Putnam, Whiteside and Woodford, at the Kaskaskia Hotel, La Salle, March 31, with Joseph T. O'Neill, Ottawa, presiding as Councilor for the District: The program included the following speakers, all of Chicago:

Arkell M. Vaughn, Vagotomy in the Treatment of Gastrointestinal Ulceration, illustrated.

Harry M. Hedge, Birthmarks.

Henry G. Poncher, Some Practical Aspects of Pediatric Therapy.

Chauncey C. Maher, Combination of Gallbladder Disease and Coronary Disease.

Frederick H. Falls, Early Diagnosis of Carcinoma of the Uterus.

Dr. Michael Gleason, Mendota, President of the La Salle County Medical Society, presided at the evening session, when Percy E. Hopkins, President of the Illinois State Medical Society, discussed Voluntary Prepayment Medical and Surgical Care.

A.M.A. CONVENTION TOUR

Illinois doctors will be interested in the tour to the A.M.A. Atlantic City meeting which has been arranged by International Travel Service, Palmer House, Chicago.

The adaptable itinerary permits joining the tour either in Chicago on June 6, or in Atlantic City (at reduced rates) on June 10 with return to Chicago on June 18.

Stops will be made in New York City, in Montreal, in Quebec, and in the Thousand Islands and a cruise up the St. Lawrence and Saguenay Rivers is included. The limited number of cabins on the river steamer makes early reservation a necessity.

SUBSTANDARD MEDICINE

A distinguished American physician recently observed, at first hand, what is happening to medical practice in England under the Labor Government's act giving everyone "free" service.

The act, he points out, did not create a single extra doctor, nurse, hospital bed or any other fa-

cility. But the demand for the allegedly "free" service has been enormous. Doctors must see an average of 100 patients a day. As a consequence he says, "This overloading has made it necessary for the physician to shy away from the chronically ill, the aged, the children, the pre-tubercular, and the borderline mental case is filling his panel. The vast amount of unnecessary medical care is crowding out the very group that the plan was touted as serving."

Finally, he found that the quality of practice is declining in other ways as well. Service which the American people regard as routine—such as obstetrical and dental anesthesia—are not considered necessary and are not covered by the act.

What makes these expert observations particularly important is that plans now being urged for compulsory government health insurance in this country have a great deal in common with England's experiment. And, should they pass, there is no reason on earth to believe that the result would be different here. Government-controlled medicine is substandard medicine, no matter where it is tried.—Randolph Enterprise.

The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

Harold M. Camp, EDITOR.

Theodore R. Van Dellen, ASSOCIATE EDITOR.

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Vol. 95, No. 5



May, 1949

ACCIDENT PREVENTION

We are reminded daily of the death toll and disability resulting from accidents. The 100,000 annual deaths gives it third place on our mortality tables and were a cancer cure to be found tomorrow, accidents would move overnight into second place. This is an ironical situation considering the advancements we have made in the prevention and treatment of disease during the last decade.

The injured have received, from a statistical standpoint, too little attention and by neglecting this aspect, the problem has been minimized. By using fatalities as the measuring stick the loss of time and efficiency produced by temporary and permanent physical disability is overlooked. This is evident when it is considered that accidents cause the death of 100,000 but at the same time over ten million individuals were injured.

The treatment of injuries is a major part of every physician's practice. Many advancements have been made to lower the death rate and minimize disability and deformity. Prevention, however, is another matter and until recently physicians were prone to accept this phase as being out of their realm. They readily admit that if a man dies in an automobile mishap he is just as dead as his neighbor who succumbs to pneumonia. The youngster who developed paralysis after falling from a ladder fares no better

than his playmate with a similar handicap resulting from polio. In other words the outcome is often the same whether we sustain an accident or fall prey to disease. The difference lies in the etiology but there is no reason why the field should be neglected by the medical profession because bacteria degeneration or hormones are not involved.

Preventing disease is not new to the physician and there is reason to believe that some of the same procedures can be followed in the prevention of accidents. It means a thorough epidemiological study of these mishaps. Preventive measures have been in progress for several years to curtail traffic and industrial accidents. The effects are noticeable in spite of statistics to the contrary. This pertains particularly to automobile accidents as the mortality rate has been rather constant for several years even though there has been a marked increase in traffic and passenger miles. The worker also has benefitted and studies now show that the number of fatalities among our employed is almost twice as great off the job as on.

But the prevention of home accidents has lagged behind and it is here that epidemiologic studies are needed the most. Thirty-five per cent of all deaths from tragedies of this nature occur in or about the house — a figure which would give it ninth place among all causes of death. Furthermore, of the 10,520,000 who were injured

in 1947, 5,200,000 were injured at home. It has been estimated also that 140,000 of the latter were left with a permanent defect. The majority of these mishaps resulted from falls, burns, suffocation, poisonous gas, poison and fire arms.

The home is in the domain of the physician and it is here that the "when, where, how and who" data can be collected to formulate preventive measures. We dropped the notion years ago that disease and infection were due to an evil, some misfortune, bad luck or a mistake of nature and the same view point must be taken in respect to accidents. Less pity and more etiology will go a long way in teaching safety. This aspect of life deserves as much attention as vaccination, quarantine, cleanliness, antisepsis, diet and sleep. Who are better qualified than the family physician and community hospital to start a project of this nature?

CONFERENCE FOR INTERNS AND RESIDENTS

Harlan English, as chairman of the Committee on Rural Medical Care, arranged a conference for interns and residents in Chicago and nearby hospitals on Tuesday evening, April 26, at the LaSalle Hotel, Chicago. It was the intention in arranging the program to have short talks on subjects which are of importance to physicians who are starting their practice, and which are not given in the regular courses at the medical schools.

Invitations were sent to approximately 75 interns and residents, and a complimentary dinner was likewise provided for the occasion. The program was as follows:

1. "Essential Equipment Needed to Start a Practice and Its Cost"
2. "How to Select Office Help and Consultants"
3. "How to Handle Patients, Collections, Home and Office Visits"
4. "How to Finance an Office, Car and Equipment"
5. "What a Physician Fresh Out of School Has Done in a Small Town"
6. "Locations Now Available in Illinois"

Following these short presentations, it was arranged to have a round table discussion, and

the group was permitted to ask questions which they had in mind at the time. Three of the speakers on this program were physicians who have been unusually successful in small town practice, and they had interesting stories to tell of their work.

The speaker on how to finance an office, car and equipment, was an official of a small town bank, who is interested in the welfare of newcomers in his and other similar towns, and he had a story to tell which was of much interest to the group at this conference.

This was the first conference of its type that has been arranged by any committee or group within the Illinois State Medical Society. The results will be most interesting, and if it seems desirable, this may be made an annual feature for the Committee of which Doctor English is chairman.

ARMED FORCES PROFESSIONAL MANPOWER SHORTAGE

We have received many letters in recent weeks from the Office of the Secretary of Defense, emphasizing the urgency of the need for physicians and dentists, which will increase after July 1. At this time, it is said, the Armed Forces will lose one third of their present staff of physicians and dentists, as their tours of duty will expire and normal procurement measures cannot fill the vast number of vacancies that will arise.

By the end of July, they will need about 1600 physicians and 1160 dentists. By next December this shortage will grow to 2200 physicians and 1400 dentists, according to recent statements of the Secretary of Defense.

According to this official, a direct appeal is being made to the 8000 young physicians and dentists who were trained at Government expense under the wartime Army Specialized Training Program and the Navy V-12 program, and who have given little or no service to the Armed Forces, to volunteer for active duty in one of the three Armed Services.

An appeal is also being directed to the 7,000 physicians and dentists who were deferred during the war to complete their medical or dental education at their own expense, and who have not

served in the Armed Forces, to volunteer for active duty.

This program is a joint undertaking of the three Services, the American Medical Association, the American Dental Association, and other allied professional groups to fill the critical professional manpower shortage which faces the Armed Forces. Local professional groups are being furnished the names of the physicians and dentists in their particular communities who received professional training at government expense, and are asked to contact these men for personal interviews to inform them regarding the critical needs of the Armed Forces. They are asked to make regular reports to the Secretary of Defense on the result of the interviews.

Secretary of Defense James Forrestal said by the end of July of this year, the Armed Forces will have lost almost one-third of the present number of physicians and dentists now in service. This will result in a shortage of about 1600 physicians and 1160 dentists. If this condition is allowed to develop the number will have increased to 2200 physicians and 1400 dentists by December.

Normal procurement procedure for professional replacements can not hope to supply the requirements for the Armed Forces. For example, during the month of January, 1949, only 30 physicians and 20 dentists were commissioned in the Armed Forces.

Should a shortage of professional manpower be allowed to materialize it could easily jeopardize the whole National Defense Program. It would mean the Armed Forces would not have enough physicians and dentists to furnish even a minimum of medical and dental service to the nearly 2,000,000 men and women in the military Services.

It is estimated that the government expended almost \$10,000,000 to educate, feed and clothe the 8,000 men who participated in the wartime programs.

If the present campaign for volunteers is unsuccessful consideration must be given to the following alternatives:

- 1) To ask for draft legislation covering physicians and dentists who have not responded to the call for volunteers.

- 2) To ask those men who served in World War II, and who hold reserve commissions, to re-entered for active duty in the Armed Forces.

- 3) To retain those men now on duty, but who are entitled to be relieved from the service upon completion of their respective tours of duty, until the shortage has been corrected.

Mr. Forrestal pointed out that this professional manpower shortage in the Armed Forces is so serious that legislation for a physician and dentist draft has already been prepared and is being held for possible use.

Mr. Forrestal announced also that Mr. Charles P. Cooper, his deputy for medical and allied professional matters, will conduct, through the Armed Forces Medical Advisory Committee, an active campaign for medical and dental personnel. The committee will also make an intensive study of the proper utilization of physicians and dentists, and of the workload in the Armed Forces, to insure against waste of precious professional manpower, and in so far as possible, that men serve in an assignment commensurate with their professional skills and abilities.

A further statement made by Mr. Forrestal reveals that he has sent personal letters to the 8000 physicians and dentists who were trained at government expense under the A. S. T. P. or the Navy V-12 programs.

In addition to professional organizations, Secretary Forrestal is asking for the cooperation of veteran, civic and patriotic groups to insure success for the campaign by translating the needs of the Armed Forces to the public, and to assist in making direct contact with individual physicians and dentists whom they know are affected by this appeal. Deans of medical and dental schools and heads of hospitals also are being asked to give their support to the program.

Mr. Forrestal said, "We have an obligation to the millions of persons concerned. These include the men and women in the Armed Forces themselves, and the fathers and mothers of these men and women who depend upon the pledge of this Government to take care of the medical and dental needs of those who serve their nation throughout the world."

STATE DEPARTMENT OF PUBLIC HEALTH



Public Health Practices For Veterinarians

Roland R. Cross, M.D.,
Director of Public Health, State of Illinois

This is an occasion which is very important to me. It is important to me personally as well as officially. When I welcome you, today, to this Institute on Public Health Practices for Veterinarians, my welcome is not only a very cordial and personal one but it is also an *official* recognition of the fact that public health in Illinois has extended its boundaries to encompass the diseases of animals as well as the diseases of man. And so today I feel towards you individually somewhat like the father who is welcoming a very eligible son-in-law into the bosom of his family.

Human and animal diseases are linked together as in a marriage, and when we examine the classical criteria for determining which diseases are the concern of public health and which are not, we will find that many diseases shared by animals and man fall into the public health category. Public health is charged with responsibility as regards:

Those diseases which are communicable.

Those diseases which are preventable.

Those diseases which affect large numbers of people.

Those diseases which are so costly to control that financial assistance from government or other sources is necessary.

Those diseases which require concerted community effort to control.

Measured by these standards you will see that many of the diseases transmitted from animals to man can be classified as public health problems, and that their solution is a joint responsibility of the *veterinary* and the *public health* professions.

Heretofore the veterinary profession has been largely an adjunct only to agriculture. It has been motivated mainly by immediate economic gains and losses for the farmer. Today, I hope, marks the turning point in Illinois when the veterinary profession will become a partner to public health as *well* as to agriculture, and when the conservation of *human health* will be as

Address made at "Institute on Public Health Practices For Veterinarians"; Centennial Hall, Springfield, March 21, 1949.

much a part of your job as is the conservation of the *farmers' investment* in livestock. Without your partnership, public health can do little to control in humans such diseases as brucellosis, rabies, mastitis and others.

We in the Illinois Department of Public Health have invited you to this Institute for the purpose of giving you a background of public health philosophy and practice, which we hope will clarify your relationship to public health, and which will give you the viewpoint of your new partners.

In asking you to work with *us*, we do not minimize the importance of the livestock industry and your relationship to it. We recognize that without a prosperous livestock industry, our entire economic structure would collapse. Without the products of healthy cattle, sheep, swine and poultry, our population could not be properly fed and clothed. In these days of a worldwide shortage of animal food products along with a steady increase in human population, the importance of the livestock industry is greater than ever before.

We have in the past looked to you as a profession indispensable to the maintenance of our food supply, our clothing, and our economy. We are *now* looking to you as a vital profession in the maintenance of our health. Many human diseases can be controlled *only* at the animal source of the disease. We must have your full cooperation in attacking these diseases at the animal source. Veterinary and public health programs of disease prevention *must be coordinated*. We hope that this Institute will be the beginning of an understanding of our mutual problems, and that it will result in strong, aggressive, forceful teamwork in their solution.

While the *prevention* of disease was, historically, the prime purpose of public health, the maintenance of optimum health and well-being is *now* a concern of *equal* importance. We are therefore not only interested in the diseases which animals may contract and transmit directly or indirectly to man, but we are also concerned over the *quality* of the nutriment in animal foodstuffs; because good nutrition is essential to optimum health. We know that *every* cabbage is not always an *adequate* cabbage from the nutritional angle. Poor soil may make a given cabbage much inferior to the *standard* cabbage.

Nutritional deficiency is not always due to the *lack* of food; it can be due to the *quality* of the food. This has proven to be the case in regard to vegetation. I understand that research is underway to determine the extent to which nutritionally substandard feed produces substandard meat which may in turn contribute to substandard human health.

If you, as veterinarians, are ready to accept the role of key men in the control of certain human diseases and in the maintenance of good human health through nutrition, you may well ask, "What is it that you public health people wish us to do?"

Well, we cannot *fight* an enemy until we *locate* the enemy. We cannot pit *our* strength against an enemy until we know *his strength*. If animal diseases are the enemies of human health then our first task is to *locate*, literally and geographically, those diseases. Our first task is also to estimate the extent of those diseases and their relative potency.

We need to follow the same procedure in regard to animal diseases which are transmissible to man, as we have followed in such diseases as smallpox, diphtheria and typhoid fever which are now well under control. It is essential that we be informed about every case of smallpox, diphtheria or typhoid fever; where it is located; how it originated; to whom it is likely to spread. Only through such knowledge can we take the necessary measures to *prevent* its spread. This procedure, namely, *the reporting of disease*, is one of the "ABC's" of public health. This procedure must be the "ABC" in the control of animal-to-man diseases.

Cooperative and coordinated investigations by veterinarians and health officers of animal disease sources, animal disease reservoirs, avenues of disease transmission, must take place. The skill of the veterinarian in detecting animal disease, his promptness in applying therapy, his assistance to the husbandman in animal management and sanitation are as essential to public health as they are to the prosperity of the livestock industry. These things are indeed *vital* to public health. They must be made a part of the public health program, and we in public health look to the veterinary profession to bring this about.

We are aware that neither our profession nor the veterinary profession can accomplish anything without proper understanding, sympathy and cooperation on the part of the public. The public must *know* the dangers of animal disease; the public must know *why* disease control measures are instituted and what they propose to accomplish. This knowledge must be acquired by the citizenry through what is known as "public health education." The veterinarian must therefore assume the additional task of being an educator. He must preach and teach the gospel of human health as well as the gospel of prosperity through health livestock. It is the purpose of this conference to give you some background and perhaps some pointers to use in your new role of health educators.

The papers listed on this program will, I am sure, be rich with information and facts. We hope that you will take home with you a great deal of public health knowledge. But, if there were a *choice*, we would *prefer* that you leave this Institute, not with a lot of new facts in your heads, but with a new *feeling* in your hearts towards your responsibilities to man and beast. We hope that this feeling will impel you to go home and get acquainted with your local public health officer and his staff. We hope that it will impel you to start immediately our first joint project — that of reporting animal diseases to the State Department of Public Health. Other projects will follow — this is a necessary first step — a step on the road which we shall tread together.

ADVISE CAUTION IN USE OF DICUMAROL

Dicumarol, a drug which prevents clotting of the blood, should be used with extreme caution, warn three Chicago doctors and two Ann Arbor, Michigan, doctors in the March 19 issue of The Journal of the American Medical Association.

In no case should the drug be used unless reliable laboratory facilities for testing prothrombin, a factor involved in clotting, are present, say Ivan F. Duff, M. D., and William H. Shull, M. D., from the Department of Internal Medicine, University of Michigan and the University of Michigan Hospital.

The drug should be used with caution in patients with severe high blood pressure, they em-

phasize. The Ann Arbor doctors report a case of death, apparently from dicumarol, which occurred at the University of Michigan Hospital.

They report seven deaths attributed to dicumarol among patients with subacute bacterial endocarditis—inflammation of the membrane which lines the heart—and 16 deaths attributed to dicumarol among patients with other conditions. These 23 deaths occurred at various places other than the University of Michigan Hospital.

Animal experiments show that dicumarol treatment is not advisable for pregnant women, advise Alfred P. Kraus, M. D., Samuel Perlow, M. D., and Karl Singer, M. D., from the Department of Hematologic Research, Medical Research Institute, and the Department of Surgery, Michael Reese Hospital, Chicago.

MEDICAL ECONOMICS

The Medical Economics Committee. Chauncey C. Maher, Chmn., Hubert L. Allen, Emmet B. Bay, Edwin F. Baker, Carroll Birch, Thomas C. Browning, Roland R. Cross, James Graham, George Halperin, Edwin S. Hamilton, Ford K. Hick, Edwin F. Hirsch, May McDonald Milligan, Marie Wessels, Walter M. Whitaker, Holland Williamson.



Convalescent Hospitals

More people are interested today than even before in providing adequate hospitalization for themselves and their families. As a result of the introduction of the Blue Cross, and similar plans, throughout the nation the general hospitals are now rendering a tremendous volume of service. According to a recent report of the Council on Medical Education and Hospitals of the American Medical Association the total number of hospital beds in the United States has decreased, while the total admissions has increased. This is accounted for, in many instances, by shorter hospital stay, due to early ambulation and modern chemotherapy. With the increased number of admissions to general hospitals, and undoubtedly more and more hospitalization plans coming into being, the problem of convalescent care must be considered more seriously than ever before. The public and the doctor have taken desultory interest in the process of convalescence. Convalescence may be defined as the period of recovery from acute illness, or accident, after the acute phase has subsided, until complete recovery, or rehabilitation, has been attained.

In some of the general hospitals the old age pensioner, the blind, and other recipients of pub-

lic aid, are admitted only if they are acute "emergencies." The county nursing home, a converted "poor farm" in most communities, is the only institution where these aged or chronically ill may be admitted, or where convalescent care can be obtained. The facilities are not ideal and as a rule these institutions are over crowded.

A convalescent hospital, or a convalescent section of the general hospital, appears high on the list of answers to this growing problem of patients in our general hospitals. Whether this should be an additional wing to the present hospital, or a separate institution, is debatable. For the "short term" convalescent patient the additional wing to the general hospital would appear to be the most feasible, while the "long term" convalescent possibly could be cared for in a separate institution where patients need only supervisory care. Such a plan would allow a smaller staff of trained personnel to care for a large number. The day has passed where three graduate nurses perform personal services for one patient, whether rich or poor. There just are not that many nurses today. Certainly there are not enough well trained, expert nurses to

render highly specialized care to one particular case.

From many reports the small privately owned and operated nursing home is not the answer to the mounting needs. Many are poorly supervised, and poorly staffed. A few conscientious operators of nursing homes are rendering invaluable service, especially in the care of the chronically ill patient. These homes are few.

Whether these convalescent homes are provided for by public or private funds, or both, depends upon the conditions in a given community. If a separate institution is desired, it is best located away from the congested areas where ample space can be provided for outdoor recreation and pleasant environment. With the rising tide of chronic illness the convalescent hospital should be seriously considered in any community health program. Facilities for children should be a well rounded part of any program of convalescents, especially the rheumatic fever patient or orthopedic cases.

The convalescent hospital program instituted in World War I and II has crystalized much of our thinking along these lines. The tremendous value of hastening recovery following illness, or injury, of our soldiers has been clearly demonstrated.

In the metropolitan areas such plans as the Montefiore Home Care is a trail blazer for the chronic long term illness. In smaller communities without medical schools the plan may be workable, but the lack of medical residents, or house physicians, interferes with the actual operation. The great majority of convalescents should,

and will no doubt always be taken care of in the home, however, the home is not always compatible with a long term convalescent, especially if the patient is elderly. A generally accepted standard is approximately twelve per cent of the general hospital beds for convalescents, and twenty-five per cent of these should be for children.

The local medical society should take the lead in any community to see that the long range health program plan should include some provision for a convalescent hospital, thereby reducing the load of our over-crowded, and under-staffed, general hospitals. It has been found that the construction costs of convalescent units are about half that of general hospitals. Therefore, if more general hospital beds are freed by transfer of the convalescents, a definite saving is realized to the general hospital.

Industrial communities should be more than interested in furthering such a program for convalescents, with the earlier return to work of their employees. The armed forces demonstrated its value in expediting recovery for combat soldiers. The same could be done in the civilian hospitals with large numbers of industrial cases.

Close team work between the city administration, the county medical society, the welfare agencies, the social service group, as well as the women's auxiliaries to the general hospital, would be of great help in the establishment of a convalescent hospital in almost any community, worthy of the dignity and respect that such an institution should bear.—H. W.

CORRESPONDENCE



“Your Mental Hospitals” INCREASE OF HOSPITAL POPULATION

In 1917 there were slightly over 16,000 patients in mental institutions of this state. The population has gradually increased until at present there are 34,500 patients in the nine mental institutions.

This increase in patient population has been gradually on the upgrade except for slight remissions during the war years of 1917-1919 and 1942-1943. A recent statistical report issued by the Division of Mental Hygiene of the U. S. Public Health Service, Federal Security Agency indicated that there was a nation-wide progressive increase in state hospital population. The factors given by this agency for the increase in patient population are as follows:

1. The more adequate provision of facilities for the care and treatment of the mentally ill.
2. A considerable and fairly continuous increase in knowledge concerning the nature of mental illness on the part of the medical profession and of psychiatrists in particular; this has resulted in an increased number of cases formerly not recognized as mentally ill being diagnosed and committed to hospitals.

3. A growing realization on the part of laymen that mental illness is a problem in which the individual patient requires psychiatrically oriented treatment and also an increasing knowledge that the individual patient is susceptible of improvement and recovery if treatment is taken in time.
4. An increasing public confidence in the management of a large number of hospitals for the mentally ill with increased use of these hospitals on a voluntary basis by persons who formerly avoided treatment or remained in seclusion elsewhere.

Chart 1 shows the growth of mental hospital population for the nation for the period 1903 to

CHART 1

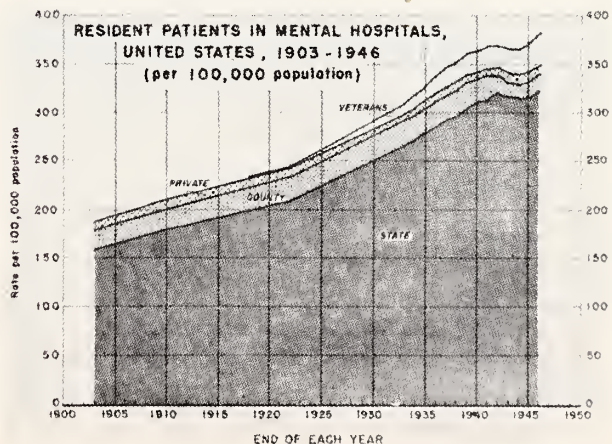
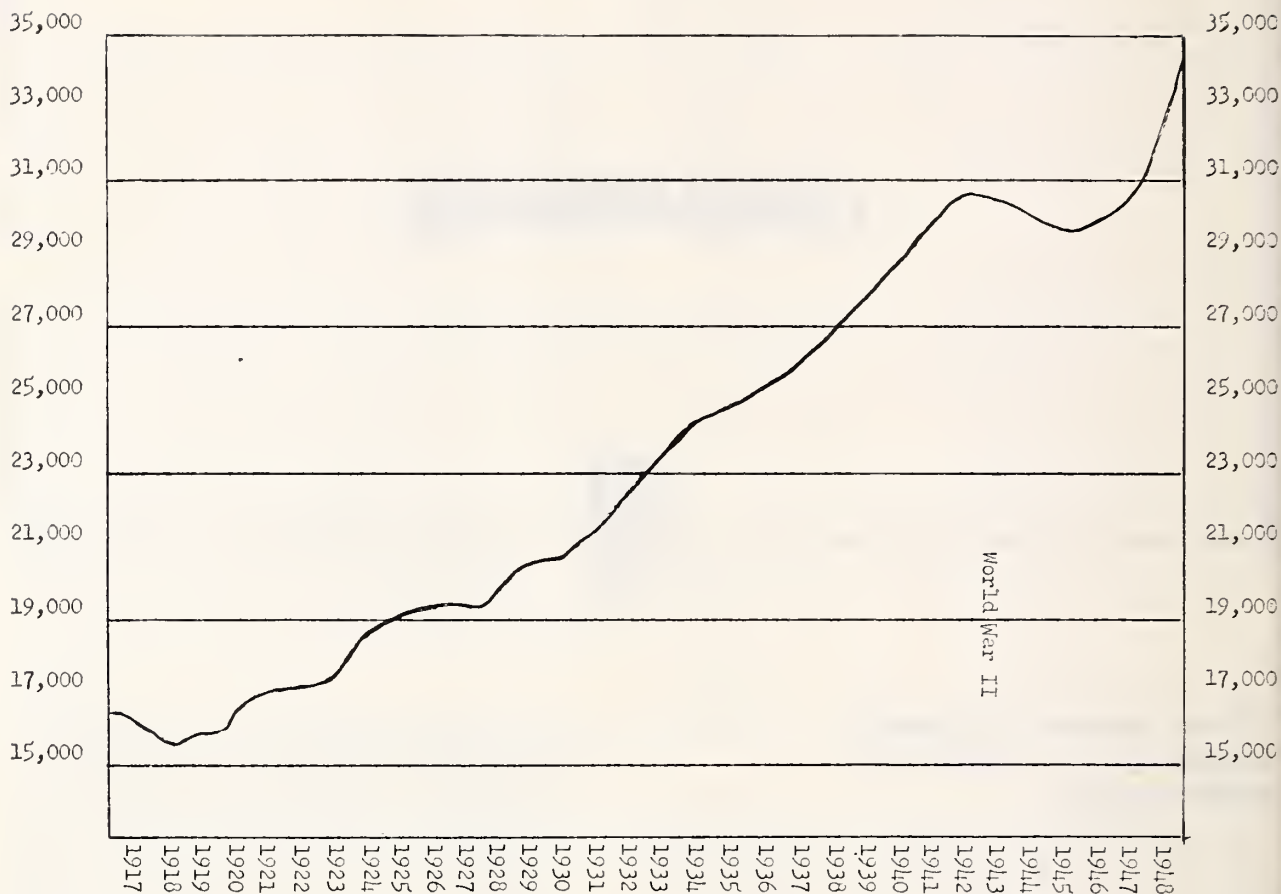


CHART 2
Patients in Illinois State Mental Hospitals
1917-1918



1946. This includes the patients in public, private, and veterans' institutions.

It is very interesting to compare the patient population in the Illinois state institutions. During the last thirty years there has been a progressive increase in population, except for the period during World War I and World War II. According to available statistics, this population will continue to increase, because of the above mentioned factors and the increased longevity of persons, which would add to the number of mentally ill persons with senile dementia and arteriosclerotic psychoses. See Chart 2.

Estimation of the therapeutic effect of any drug on such a disease as human tuberculosis is extremely difficult. This is especially true in view of the chronicity of most forms of the disease and the known favorable response of the disease to proper diet, collapse therapy and rest in the absence of any treatment with drugs. Archie H. Baggenstoss, M.D., William H. Feldman, D.V.M., and H. Corwin Hinshaw, M.D., *Am. Rev. Tuberc.*, Jan., 1947.

CLINICS FOR CRIPPLED CHILDREN LISTED FOR JUNE

The University of Illinois Division of Services for Crippled Children has scheduled 18 clinics to be held in the month of June. Dr. Herbert R. Kobes, director of the Division, stated that 12 of these are to be general clinics where diagnostic, orthopedic, pediatric, speech and hearing examinations will be made; 4 are to be for children with rheumatic fever and 2 for cerebral palsied children.

The June schedule is as follows:

- June 1—Chicago Heights, St. James Hospital
- June 2—Hinsdale, Hinsdale Sanitarium
- June 7—E. St. Louis, St. Mary's Hospital
- June 8—Glenview, Village Hall
- June 8—Rock Island (Cerebral Palsy), St. Anthony's Hospital
- June 9—Elmhurst (Rheumatic Fever), Elmhurst Community Hospital
- June 10—Chicago Heights (Rheumatic Fever), St. James Hospital

June 14—Peoria, St. Francis Hospital
 June 14—Watseka, County Court House
 June 15—Elgin, Sherman Hospital
 June 16—Rockford, St. Anthony's Hospital
 June 17—Litchfield, St. Francis Hospital
 June 21—Fairfield, Masonic Temple
 June 22—Springfield (Cerebral Palsy), St. John's Hospital
 June 24—Chicago Heights (Rheumatic Fever), St. James' Hospital
 June 28—Peoria, St. Francis Hospital
 June 28—Effingham (Rheumatic Fever), St. Anthony's Hospital
 June 30—Normal, Brokaw Hospital

Over 7100 visits were made to the 145 general clinics held during 1948 and more than 10,000 individual examinations made.

During 1948, 2,225 children were placed on register of the Division.

Approximately 650 children received private physician's service through the Division and 2,100 visits were made outside of clinics, hospitals, and convalescent homes, during 1948.

These diagnostic clinics are conducted by the Division in cooperation with local medical and health organizations. The physicians who serve on the various clinics staffs are private physicians who are certified Board members. The follow up work on the children is based largely upon their recommendations for treatment and care. Private physicians may refer or bring children to a convenient clinic for examination or consultative service.

ALL PHYSICIANS INVITED TO PRESIDENTS' CONFERENCE

Discussion of compulsory health plans, for medical care and for disability compensation, will highlight the fifth Annual meeting of the conference of presidents and other officers of state medical associations to be held at Atlantic City on Sunday afternoon, June 5. The meeting will be held in the Rose Room of the Traymore Hotel, the day preceding the opening of the AMA general sessions, and it will be open to all physicians.

Cecil Palmer, English publisher, author, and journalist, will tell of the impact of socialized medicine on the British doctor and his patients. Palmer, now completing a tour of America, has

been a brilliant spokesman for the British Society for Individual Freedom. An American viewpoint of the British health system will be given by W. Alan Richardson, editor of *Medical Economics*, now in England for a first hand study of all phases of the program.

With compulsory disability compensation programs operating in three states, and Washington and New York the latest to pass such laws, the Conference presents two speakers on this vital question. Edward H. O'Connor, managing director of the Insurance Economics Society of America, will discuss the legislation, and Dr. Bert S. Thomas medical director of the California program, will tell of the medical implications of cash sickness compensation acts.

The AMA relationship to the state societies will be reviewed by Dr. George F. Lull, secretary of the AMA, and the problems facing the state association at the crossroads will be the subject of a talk by Dr. Clarence Northcutt, president of the Oklahoma State Medical Association. Plans are also pending for the presentation of views on national health legislation by a member of Congress.

FIRST OF SIX CANCER FILMS NOW AVAILABLE

A new film, titled "Cancer: The Problem of Early Diagnosis", which has received the approval of the American Medical Association's Committee on Medical Motion Pictures, has been made available to the medical profession through more than 50 state and regional distributing points.

Through the efforts of its co-sponsors, the American Cancer Society and the National Cancer Institute of the United States Public Health Service, prints for single showings may be borrowed from State Cancer Society officers, State Health Departments, and four regional offices of Association Films located in New York City; Chicago, Illinois; Dallas, Texas; and San Francisco, California.

The film, designed for general practitioners, is based on the premise that if cancer were diagnosed early and effectively treated the death rate might be reduced by almost 50 per cent.

"Cancer: The Problem of Early Diagnosis" is the first in a series of six films to deal with the subject. The succeeding five, to be released

within the next two years, will deal with diagnosis of cancer by specific body site.

Prints of the film are also available for purchase through Audio Productions, Inc., 630 Ninth Avenue, New York 19, N. Y., the company which produced the film. Prints cost \$150 each, and may be ordered from Audio Productions for preview pending purchase.

The film was reviewed in the January 29th issue of the *AMA Journal*. The comment was: "The photography, animation and narration are excellent."

RADIO HEALTH SERIES RECEIVES NATIONAL AWARDS

Although on the air only since October 18, 1948, the Chicago Industrial Health Association's first project, the radio health series called, "It's Your Life" has already received 3 national awards. Ben Park is the radio producer and the Director of the Radio Division of the Association. Johnson and Johnson, manufacturers of hospital and medical supplies, are the sponsor.

The first award was presented to Johnson and Johnson at the Waldorf-Astoria hotel in New York on March 4th and consisted of a bronze medal representing the Annual Advertising Award for 1948 for "Outstanding Contribution to Radio as a Social Force". On March 15, 1949, it was announced that on March 30th, the City College of New York, through its School of Business and Civic Administration, will award a plaque "For the Creation of the Outstanding

Radio Program of 1948". The radio series will also receive the Award of Merit for "The Creation of the Most Effective Institutionally sponsored Radio Program during 1948 by a 50-kilowatt Station". This award is also made by the City College of New York.

The series appears on WMAQ, Chicago, 5 days a week at 11:15 A. M.

It is understood that the sponsor is giving serious consideration to eventually placing this health series on a national network.

INTERNATIONAL CONGRESS ON RHEUMATIC DISEASES

The current interest in arthritis and the other rheumatic diseases will receive additional impetus when several hundred physicians from the United States and foreign countries gather at the Waldorf Astoria in New York for the seventh International Congress on Rheumatic Diseases from May 30 to June 3.

A postconvention tour will cover the sixteen days following the session of the American Medical Association. Philadelphia, Boston, Buffalo, Detroit, Chicago, Rochester, and Washington, D. C., will be the cities visited. Scientific sessions will be held at Philadelphia, Boston, and Rochester. Sight-seeing using motor coaches will be included in the itinerary for those visiting Boston, Washington, Niagara Falls, and Chicago.

Inquiries concerning registration, the complete program, and other aspects of the Congress can be addressed to Mr. Robert D. Potter, Executive Director, 535 Fifth Avenue, New York, New York.

ORIGINAL ARTICLES



The Physician's Responsibility Toward the Hard-Of-Hearing and Deafened

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Today the medical profession is able to offer more to the hard-of-hearing and deafened patient than ever before. Yet, it is generally true that the members of the profession find themselves unacquainted with recent advances in the diagnosis and treatment of the patient with hearing loss and, therefore, have been unable to assume their rightful responsibility to that patient.

Much has been written in the lay press and popular magazines about the rehabilitation of the deafened in the Armed Forces, about the possibilities of surgical improvement of hearing,

and about the educational training of the deafened child. Such publicity, in the main, has been accurate, and all of it has offered unbounded hope to the millions of hearing-handicapped people in this country and elsewhere. But these people, consulting their physicians, have not been able to receive either the necessary advice or an understanding of their particular situation. It becomes the obligation of the men within the profession, who have had experience with the deafened, to convey their knowledge to their colleagues in order that all may provide confident and enlightened counsel to the hard-of-hearing patient.

The greatest advance in the treatment of the deafened has come in the integration of the services of those various specialized fields and agencies which have concerned themselves for years past with hearing-handicapped people. We

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Read before General Assembly, Illinois State Medical Society, Chicago, May 10, 1948.

have always had otolaryngologists, psychologists, physicists, acoustic and electronics engineers, teachers of the deaf and speech therapists, but they have worked alone or in their little groups, occupied with a small specialized phase of the hearing problem. It was the impetus of the last war, producing its great numbers of hearing-handicapped, that forced an overall approach to a situation that had heretofore been handled piecemeal. The hard-of-hearing patient was found to be a person who not only had ears, but also a mind, a social nature, and a spirit; and that all his potentialities and assets had to be considered. The specialists, if they wished, could stand alone, although it was obvious that the patient would fall. This was not a surprising observation, nor a new one, but it resulted in an effective team that applied its collective talents to the person with hearing loss.

As soon as the team of specialists began to function in the Rehabilitation Units, there emerged certain fundamental principles in the understanding of hearing loss in adults. Most important among these were: (1) that no matter how severely damaged was the hearing apparatus, some hearing function usually remained, and (2) that a person with hearing loss can be taught to understand his handicap and then be provided with the implements with which he can resume his place in society as a productive and reasonably happy individual.

Once these lessons were learned, the process of rehabilitation proceeded with uniformly excellent results. It became apparent to the men and women who worked in the units that similar conditions could be applied to the great group of civilian deafened of all ages and that the same results could be obtained. Today such units have been organized and are functioning in some of the universities and in the Veterans' Administration. These large hearing centers consider all aspects of the hearing problem and offer integrated services for the diagnosis and treatment of the deafened and hard-of-hearing patient. The centers also provide a source of training and information to physicians and interested professional people, as well as a nucleus of research activity which constantly will supply new facts to the general knowledge of hearing defects.

Some hearing-handicapped patients will gravitate directly to the hearing centers. By far the greatest majority, however, will come to the family physician. In every community, large or small, he will be the first to be sought out by patients with hearing loss. It is this first visit to the physician that is critical in the future course of the patient. If, in answer to the patient's questions, the physician replies with a "nothing-can-be-done-about-it" or "wait-until-the-child-is-a-little-older" attitude, the patient and the parents cannot help but assume that he has heard the final word from a spokesman in the profession. Many patients will give up and retire hopelessly to their silent and frustrating world. Others become the prey of uninformed hearing-aid salesmen and medical quacks. They squander their money and time in a fruitless effort to find relief. If, however, the physician gives optimistic and sympathetic counsel, the patient can be directed easily into legitimate, scientific, medical channels in which his hearing defect can be diagnosed and proper treatment instituted.

Three groups of hearing-handicapped patients will come to the physician's office, but his responsibility to each of them is fundamentally the same:

GROUP I. THE INFANT AND PRE-SCHOOL CHILD.—A worried mother brings her child to the doctor because he does not seem to respond to ordinary or even loud sounds, or because he speaks poorly or not at all. She already has an intimation that he does not hear well, if at all, but she would like to know exactly what is wrong and what she can do about it. A careful history at this point frequently will suggest the diagnosis of hearing deficiency. So-called congenital deafness can be caused by consanguinity, syphilis, an hereditary anomaly (which may exist in other members of the family), and German measles in the mother during pregnancy, (apparently a very common cause of congenital deafness as well as ocular, cardiac, and other developmental defects). Birth injuries, the Rh factor, anoxia of the new-born are important possibilities. A severe infectious disease early in childhood, such as measles, mumps, scarlet fever, or meningitis, may drive the hearing down to the point where the

child cannot perceive ordinary sounds and is hindered in the development of speech.

While the history is suggestive, nothing less than a complete survey of the hearing mechanism can reveal the true nature of the hearing defect. Supplementary laboratory and x-ray studies may be necessary to establish the diagnosis. It is the responsibility of the physician to inform the mother that a diagnosis must be made but not to feel discouraged if the hearing loss is found to be irretrievable. The patient may be referred to an otologist in the vicinity, or, if that is not possible, the parent can write the Commission For Handicapped Children, 160 North LaSalle Street, Chicago, for prepared information relative to available agencies and facilities. In any case, the mother should be told that if her child be found deaf, his future education can be assured by the many facilities in the State of Illinois conducted expressly for the hearing-handicapped child. There are regular parents' courses organized for the purpose of explaining the methods of rearing a child who cannot hear. These are conducted every summer by the State School for the Deaf at Jacksonville, and during the year by the University of Illinois and the Department of Public Welfare at the Illinois Eye and Ear Infirmary in Chicago. There are deaf-oral classes in most of the urban areas for the children when they become of school age. The children are taught to speak even though they are unable to hear speech, and they are taught vocational skills that fit them for a useful life in a normal-hearing world.

It is imperative that the mother be told emphatically to facilitate her efforts to find out whether her child is deaf and then to begin his education at the earliest possible time. The diagnosis can be made *now* by competent otologists. A delay in diagnosis merely complicates an already difficult problem of education.

GROUP II. THE SCHOOL CHILD.—Cerumen in the ear canals, the various exanthemata of childhood, trauma, and the complications of the common cold cause much of the hearing loss in this group. Apparently, however, the greatest single cause of decreased hearing among these children is chronic eustachian tube obstruction as a result of lymphoid hyperplasia in the nasopharynx. The reasons for the hyperplasia

are not entirely clear, but recurrent nasal infections and allergy of the upper respiratory tract seem to be responsible. There are an estimated 1,500,000 to 2,000,000 children in the United States who have defective hearing in one or both ears. In Illinois, of 200,000 known handicapped children, an estimated 50,000 have hearing defects.

Again the physician is consulted by the parents. Sometimes the hearing loss obviously is due to running ears which are remediable under appropriate medical or surgical management. Most often the school child is brought to the doctor because the teacher suspects that poor grades may be due to difficulty in hearing. In some instances, the only presenting symptom is a change in behavior in the child. The teacher or the parents may report that the child has become "naughty", reluctantly answers questions, and shows a lack of desire to join in with the rest of his classmates in study or play.

In the absence of any local ear findings, the only way that the diagnosis can be made is by careful testing of the hearing with tuning forks and the audiometer. If the hearing is found to be deficient, a careful examination of the ears, nose, and throat must be done. The nasopharynx, and the orifices of the eustachian tubes are observed with the post-nasal mirror and electric nasopharyngoscope. If evidence of sinus disease, nasal allergy, or obstruction of the tubal orifices be present, appropriate treatment for the relief of the condition can be started. The antibiotics and antihistaminic drugs are of value in some nasal affections of an infectious or a vasomotor character. The use of the radium applicator in conjunction with judicious removal of excessive adenoid tissue has given the otologist a method to reduce the obstruction at the mouths of the eustachian tubes and, in this manner, to improve the acuity of hearing in selected cases where this type of pathology is found to be a causative factor.

The school child whose hearing has been found to be incapacitating and for whom no medical or surgical treatment is indicated can be managed in the following ways:

1. Advantageous seating close to the teacher.
2. Scientific hearing-aid prescription and instruction in its use by specialists. Children from

the age of six can be taught to use the aid effectively.

3. Attendance in special classes for the hearing-handicapped, where auditory and speech-reading training is given in conjunction with regular school education.

4. Re-examination at stated intervals by qualified physicians to determine the progress of the hearing defect.

It is exceedingly difficult to reach the great numbers of school-children with occult hearing loss except by means of periodic, routine, hearing testing programs, which should be part of the school health plan. In this regard, we recently concluded a hearing survey of all school children in Will County, which was undertaken by a group of interested local and state agencies at the request of the Governor's Commission for Handicapped Children under the aegis of the University of Illinois.

Using the pure-tone audiometer, a specially selected team of audiometrists tested every child in school according to a pre-arranged schedule. Children found to have 30 or more decibels loss in any frequency in either ear were referred to an otologic clinic, conducted by qualified otolaryngologists supplied by the University of Illinois. The organizational work in the schools was administered by the staff of the Will County Health Department. The children were given a complete ear, nose, and throat examination in the presence of the parents. Those found with ear, nose, or throat disease contributory to the hearing defect were referred to their family physician or otologist of choice. That physician, in turn, sent an abstract of his treatment to the Health Department where a running record of the Child's progress was kept.

In the survey of 21,000 children in Will County, approximately 7%, or 1,550 children, have been found to have significant hearing defects which are in need of preventive or active medical management.

It is within this group of school children that the most important work for the detection, improvement, conservation, and rehabilitation of hearing can be realized. Early diagnosis and treatment can be instituted. All fundamental prevention of deafness programs will have their bases in these surveys. Since the physician is a key figure in any health program, it is his responsibility to understand and encourage care-

fully planned and scientifically conducted hearing surveys in his community.

GROUP III. THE ADULT.—Fifty percent of all adult hearing losses have their beginnings in childhood. The complications of recurrent colds, eustachian tube obstruction, and otitis media leave their mark. Gradually, insidiously, diminution of hearing acuity creeps up on the adult who has had "trouble with his ears as a child". He has to strain to hear conversations that he formerly followed with ease. Words escape him. He sometimes laughs when no joke was intended. He develops a feeling of insecurity. He worries about keeping his job. Life, troublesome as it is, becomes more so. In the same boat with him is the other 50% of adults whose hearing loss is caused by otosclerosis, trauma, drug, and systemic intoxications.

All these people need help of a very special kind. They need, first of all, an accurate, inclusive diagnosis. Some adult deafened can be helped by proper local or systemic therapy. Otosclerotics may be suitable candidates for the fenestration operation. It is a procedure which does not as yet promise full or complete restoration of hearing, but hope is to be expected from further study and application of the operation under proper indications and careful surgical technic.

The predominant mass of adult-hearing-handicapped can be restored to useful individual function as follows:

1. Diagnosis (Intracranial and systemic disease must be ruled out).
2. Explanation of the handicap to the patient.
3. Medical and surgical treatment as indicated.
4. Scientific evaluation of a suitable hearing aid under proper sound-deadened conditions.
5. Speech reading.
6. Auditory training — gradual development of tolerance for amplified sound and discrimination of speech.
7. Vocational and psycho-social guidance — discovery of abilities and aptitudes — personality assets.

CONCLUSIONS

1. Every member of the medical profession must reevaluate his attitude toward the hard of hearing and deafened patient in the light of

recent advances in the diagnosis and treatment of hearing defects.

2. It is the responsibility of every physician to encourage early diagnosis of hearing loss in the infant and pre-school child and to advise parents of the proper channels through which they may obtain help.

3. It is the physician's responsibility to en-

courage the search for hearing losses in school children and to recommend definitive treatment.

4. It is the physician's responsibility to acquaint the adult hard of hearing and deafened patient with the possibilities of medical, surgical, and rehabilitative treatment — to aid in the conservation, prevention and alleviation of deafness.
1853 West Polk Street.

Observations On Prophylaxis Of Puerperal Infection

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Ever since the days of Kirkland¹, Gordon², Holmes³, Semmelweiss⁴, Lister⁵, Pasteur⁶, and others, medical men have been seeking methods to prevent puerperal infection. The increased number of pregnancies, inadequate bed space, and scarcity of hospital personnel have increased the danger of, and have emphasized the importance of reviewing available methods to prevent this disease.

A better knowledge of prophylactic measures should insure a minimum of maternal and foetal deaths, fewer surgical and medical complications in women, and fewer coronary accidents in men practicing obstetrics.

Charles White of Manchester, in 1773, Thomas Kirkland of Ashby, in 1774, and Gordon of Aberdeen, in 1795, were the first to consider puerperal infection as a contagious malady. Oliver Wendell Holmes, in 1843, further emphasized this, but his suggestions were merely the "counsel of despair". He advised the physician to stop practice for a time, take a bath and buy new clothes. Semmelweiss went further by introducing the use of a solution of bleaching powder for disinfecting the hands, and reported a striking reduction in puerperal sepsis. Lister emphasized antiseptic methods, and finally Pasteur

clinched the problem by developing the field of bacteriology. Now, no one doubts the infectious nature of the disease.

At the 1947 meeting of the American Congress of Obstetrics and Gynecology, such men as Eastman and Greenhill stated that puerperal infection is still the greatest obstetrical hazard, outranking hemorrhage and toxemia as the chief cause of maternal deaths.

Stander⁷ believes the prophylactic measures that will prevent puerperal sepsis are far superior to the most specific of the newer therapeutic agents. He who is best acquainted with the natural history of the disease will have the greatest skepticism concerning remedies of all sorts, until their value has been confirmed by conscientious observers using approved methods of investigation, and will be most cautious in treating desperately ill women except with known and accepted methods. Experience shows that well chosen and timed operative procedures have a low incidence of the disease in contrast to those patients upon whom ill advised and poorly timed procedures are carried out.

Puerperal morbidity is defined as a temperature of 100.4 or higher on two consecutive days

after delivery of the baby, exclusive of the first twenty-four hours.

Prophylactic measures to prevent such rise is the theme of this paper, and a review of many of the methods suggested or tried will be discussed. Our chief interest in this study is with prevention or the prophylaxis of infection of the female genitalia after pregnancy. Extra genital types of morbidity as mastitis, pyelitis, cystitis, upper respiratory infections will not be considered.

Puerperal infection is believed to be primarily a wound infection. Laceration of the vaginal vault, episiotomies, cervical tears, and denuded surfaces of cervix and uterus offer a portal of entry for virulent organisms. Separation of the placenta and its membranes also provide a vulnerable surface for infection.

To understand better the prevention of puerperal infection, one should know the chief organisms which cause the disease, their chief source, and their mode of entry.

The ones most frequently found in puerperal morbidity are aerobic alpha and beta hemolytic streptococcus, anaerobic non hemolytic streptococcus, staphylococcus aureus, Clostridium Welchii, the colon proteus group, pneumococcus and gonococcus. There is some disagreement as to the frequency of each.

There are two types of infection to be considered, the exogenous and the endogenous. The exogenous infection is one that is brought into the vaginal tract as a new offender. Droplets may be sprayed from nose and throat of any one present during labor, even from the patient. Chief of these are the aerobic beta hemolytic streptococcus. It is recognized as the most virulent of all. Colebrook⁸ draws the conclusion, "That in most of these cases the streptococcus concerned was not present in the mother's genital tract before delivery but was conveyed to it in some way during or after delivery. Sometimes from some other part of her own body, more often perhaps from an extraneous source". He further states, "All evidence we have, therefore, based on the examination of 855 women by my colleagues, Drs. Fry and Hare, indicate that the dangerous variety of Haemolytic streptococcus is hardly ever present in the genital tract at the onset of labor". He believes that the spread occurs by contagion by any channel by which

a droplet or spray infection ordinarily occur and that the organism is usually the streptococcus hemolyticus.

The English authors would then advocate careful check on the common colds, all open infections, and acute upper respiratory infections. This check should be made on the patient, those in the same house, and all attendants at time of delivery. Isolation when possible, careful masking and thorough cleansing of vulva-perineal area are imperative. J. H. E. Woltz⁹ and many others are in accord with Colebrook's conclusions.

The endogenous or auto infections are those in which the organisms are present in the vaginal tract before labor. These gain access to the vagina and placental site by douches, late coitus, vaginal or rectal examinations and by the trauma of labor and delivery. Many American investigators believe most puerperal infections are endogenous, the anaerobic non hemolytic streptococcus being the most common offender and the most difficult to control. This organism is particularly resistant to chemo therapy and antibiotic remedies.

Colebrook, Doderlein, Menge, Williams, and others believe that most organisms inhabiting the vagina are not pathogenic and the average woman is resistant to the organisms of her own vagina. R. Gordan Douglas and Davis¹⁰ indicate in their studies of 1000 cases that the endogenous strains of different non hemolytic streptococcus are the chief causes of puerperal morbidity. Stander also agrees with this opinion.

Lopez¹¹ found anaerobic streptococcus in vaginal flora of 10% of obstetrical cases. However, none of these had clinical manifestation of auto infection with this organism. Morbidity occurred only in presence of vaginal and cervical lesions before the local infection could gain a foothold.

We can divide the study or methods used in prophylaxis of puerperal morbidity into those chiefly concerned with the antepartem period, the intrapartem, and the postpartem, the last two overlapping somewhat.

J. Bernard Berstine¹² has reported several series in the antepartem period in which the bacteriology of the birth canal of pregnant women was studied by cultures. Vaccines were made in all, and eight to thirty injections given from second to seventh month of pregnancy. Puerperal morbidity in over 1400 cases was 4.6%, as compared with 19.6% in the control group. In

the vaccination group there were no side effects on the babies or mortalities in the mothers.

Good antepartem care should lead to the investigation of all abnormal leucorrheal discharges. An attempt should be made to indentify the organism involved which will usually be found to be the trichimonas, monilia, gonococcus, or streptococcus. Active and adequate therapeutic measures should be taken, preferably before the seventh month of pregnancy.

Other open wound infections or any other foci of infection should be recognized and treated, as sinusitis infections, furunculosis, or any pus forming infection in rectal-vaginal area.

Anemias should be classified and adequately treated. One of the pregnant woman's best defenses against puerperal infection is the maintenance of a normal compliment of blood throughout her entire pregnancy—blood transfusion given when needed. The determination of the Rh factor and blood type is as important as the Kahn test in the antepartem period.

The dystocia clinics are helping to cut down puerperal morbidity by segregating the border line pelvis into a separate class. Surgical interference can be properly timed, if labor does not proceed normally. The Mueller method of impression in the last month is helpful for the average case. If the head cannot be impressed to the level of the ischial spines, one should be alert to intervene at the most ideal time during labor.

The intra and postpartem periods should be considered the most important because the proper handling at this time will definitely lower morbidity.

Stander has laid down many rules which, if adhered to, would certainly make morbidity a rare or harmless affair. R. G. Douglas and I. Davis advocate similar ideas, adding that rigid aseptic rules are not enough to prevent morbidity. First: Maintenance of strict asepsis as wearing of mask by the obstetricians and all attendants. Second: Restriction of vaginal exams within narrowest limits possible. Third: Greatest possible utilization of abdominal palpation and rectal examination. Fourth: Omission of prophylactic vaginal douche. Fifth: Immediate repair of perineal laceration which might otherwise offer foci for infection, preceded by redraping of patient, and changing of gloves after delivery of placenta and before repair. Sixth: Regard the genital canal of the puerperal

woman as a "noli me tangere" into which neither finger nor instrument should be introduced except in emergency. This implies omission of all unnecessary operative procedures. To this could be added proper timing of surgical interference to minimize undue trauma to birth canal. Seventh: Replacement of excessive blood loss immediately after delivery is a most important prophylactic procedure in the prevention of infection.

Many articles have been written on the vaginal instillation of antiseptics during labor as a routine measure to lower morbidity. Richard Gates¹³ of Philadelphia, reports use of Bimerphen solutions, and compares its use with other antiseptics instilled vaginally at regular intervals during labor. He states that morbidity figures released from several centers prior to the use of vaginal instillations indicate morbidity of 15-20%, with a marked reduction after its use. Specific reference is made to the reports of Schwartz and Brown¹⁴ in 1926. A reduction of morbidity by one-half was accomplished after using mercurochrome, in 1926, and iodine in glycerine, in 1930.

Brown, in 1940, reports 13 deaths in 9529 deliveries prior to vaginal instillations, and after advent of instillations there were no deaths in 12,913 deliveries. Tritsch¹⁵, in a comparative study using amphyl and 4% aqueous mercurochrome, found an equal efficiency with both. The morbidity in spontaneous deliveries was 5.4% and in operative cases were 7.4%. Mayes¹⁶ reports using 4% aqueous mercurochrome in 13,763 deliveries at Methodist Hospital, Brooklyn, with a reduction from 14.8% to 5.3%. Two deaths from sepsis in 25,345 vaginal deliveries with none in the last 11,000. He used one to one thousand solution of zephiron in 837 cases with morbidity 8.7%. Hahnemann Hospital¹⁷, Philadelphia, reports a morbidity of 7% with S.T. 37 in 1000 cases, a morbidity of 6.94% with mercurochrome, 10% morbidity with mercurochrome as a spray, and 12.02% with amphyl instilled vaginally in 707 cases.

Stander quotes studies of Douglas and Rhces demonstrating that it is almost impossible to sterilize the vagina by employing antiseptic solutions such as merthiolate, metaphen, mercurochrome, and acriflavine. In addition, a critical analysis of the statistical data presented

by the proponents of this principle has not convinced us (Stander) that their results can be attributed to the antiseptic employed. He is not prepared to advocate this principle as a routine procedure. This method would be chiefly for the endo or autogenous type of infection.

A comparison of results using various antiseptics for perineal preparation, at time of delivery, has not been attempted in this paper, the assumption being that the perineum is prepared for delivery in the same manner that the abdomen would be for an abdominal surgical procedure.

Whitacre¹⁸ reports in bacteriologic study of uterus in the postpartum period, that one out of ten show bacterial growth in two hours, and that all showed growth in two to five days. This would stress the early use of any reasonably active prophylactic treatment.

Chemotherapy and the antibiotics are the most important medications now assuming greater importance in the prophylaxis of morbidity. Most work has been with the sulfonamides and penicillin. Streptomycin, the newest, is being used chiefly where the others fail.

Meave Kenny believes small doses of the sulfonamide drugs are ineffective for prophylaxis unless curative blood levels are maintained. Stander, Colebrook, and others have determined the sulfa drugs that are the least toxic and have the greatest action against certain organisms. In general, this type of therapy is directed against all potential organisms. However, it is desirable to direct treatment against a specific organism that is known to have been present in the vagina before labor, or one to which the patient has had a recent exposure. Douglas and Stander reported the ineffectiveness of Sulfadiazine therapy when infection is well established.

Sulfapyridine is effective against staphylococcus and bacillus Coli, but has the highest capacity for crystalluria. It has also been of value in the treatment of pneumococcus, gonococcus and Clostridium Welchii.

Sulfanilamide has been used widely in the British Isles. It has certain toxic tendencies.

Sulfadiazine is less toxic and has a wider range of clinical usefulness. The best clinical results can be expected from this drug if the potentially infecting organisms are the aerobic beta hemo-

lytic streptococcus, colon bacillus, gonococcus, and staphylococcus aureus. Results are not conclusive in the aerobic and anaerobic non hemolytic streptococcus.

Douglas and Landesman give one grain of sulfadiazine every four hours for a total of six grams in twenty-four hours, plus four grams of sodium bicarbonate for a total of twenty-four grams in the same period.

Penicillin gives excellent results in hemolytic streptococcus infections. It is used in the other streptococcus conditions, staphylococcus, and in other gram positive organisms, with results that justify its prophylactic use. It apparently has little effect in the colon and aerogenes group.

Massel has suggested a synergistic action when the antibiotics and the Sulfa drugs are used together, because the one affects chiefly the gram positive and the other the gram negative organisms.

Chemotherapy and the antibiotics are used in many other ways besides the oral and parental routes.

The Mayo Clinic²⁰ reports the inserting vaginally and rectally of suppositories containing 100,000 units of penicillin. They report good results of this method as a routine prophylactic measure in preparation of patients for delivery, especially with premature rupture of membranes, and in preparation of Caesarean section.

Carrington²¹ believes in using sulfanilamide singly and in combination with sulfathiazole by rectum and vagina after operations on these viscera because it makes for smoother convalescence. Both drugs are absorbed rapidly and constantly from the peritoneum. He reports variable absorption from vagina and rectum, slowest from the former. He considers it a prophylactic measure after vaginal surgery.

Powers and Cravotta²² believe immediate postpartum administration of penicillin shortens the recovery period after Caesarean section by preventing morbidity. Pierce in a recent controlled study of 1573 obstetrical cases reports a reduction of genital tract infection from 5.3 to 2.3% when penicillin vaginal suppositories were used.

Verne J. Reynolds²⁴ adds 2500 oxford units of penicillin to each cubic centimeter of anesthetic used in local infiltration anesthesia for repairs of incision and laceration of vulva

vagina perineal areas. He used this method in 81 consecutive repairs, with average of 45 cubic centimeter, with excellent results.

Sewall and Coulton²⁵ report "Manual removal of placenta in 45 minutes if crede method fails. This is followed with immediate use of sulfadizine and penicillin certain cases. He reports morbidity of 2% as compared with 42% and no mortality as compared with 10-15% in the past".

Greenhill²⁶ believes sulfonamides and penicillin are among the greatest blessings to mankind. We can conclude with him and many other obstetricians that the sulfonamides, and antibiotics used prophylactically will lower morbidity if used during and immediately after prolonged labors, early rupture of membranes, in cases where many vaginal examinations have been made, cases of extensive vaginal trauma and lacerations, difficult forcep cases, most Caesarean sections, and other conditions associated with delivery that might possibly give a morbidity.

Gordon and Landesman²⁷ believe the control of infection by these prophylactic agents broaden the safe employment of Caesarean section; lessen urinary infection, and decreases infantile mortality. Keettel, Plass, and Scott²⁸ report favorable results with prophylactic administration of penicillin in prolonged labor, postpartem hemorrhage or difficult operative delivery.

There is, however, no escape from the fact that avoidance of undue trauma and manipulation in the birth canal is the primary and most important means of preventing puerperal morbidity.

Daro believes, in his present management of prolonged labors at Cook County Hospital, that the judicious use of pituitrin in selected cases can be considered a contributing prophylactic measure against morbidity. Labor is markedly shortened and the incidence of operative procedures lessened in many cases.

Early ambulation has been suggested as a factor in lowering morbidity. A discussion of this controversial subject is not warranted in this paper. Repair of perineum with fine catgut — single chromic O to triple chromic O tends for quicker healing and less chance of infection.

The Westlake Hospital reports a small series of cases in 1944 with a 9% morbidity with

vaginal instillation of 8 cc. merthiolate every four hours during labor; 6% morbidity with the usual aseptic surgical technic alone and a 5% morbidity with the oral administration of one gram sulfadiazine three times a day for three days, beginning immediately after delivery of baby. In 1947, the morbidity was reduced from 8% to 4% with redraping of patient and changing of gloves before repair of perineum, plus giving of antibiotic and chemotherapy in selected cases.

H. F. Connally, Jr.²⁹ reports 442 cases that were given intramuscular injections of 5 mg stilbesterol in oil after delivery and 5 mg orally each day during their hospital stay, with a morbidity of 5.6% as compared with 20.1% in the control group. 45.3% nursed their babies, in the stilbesterol group, as compared with 74.4 in the control group. The speculative explanations were: because of increased uterine tone and blood supply, sensitivity to oxytocic drugs, increased endometrial regeneration, alteration of vaginal PH, and suppression of mammary engorgement.

Galloway³⁰ regards the vulva in puerperum as an open wound and suggests a simple procedure of using sulfanilamide powder on all perineal pads to lower puerperal morbidity.

At Westlake Hospital, a routine blood count is made on the third day postpartem of all patients. Those with a hemoglobin below 85% or blood count below 4,000,000 are automatically given 2 capsules ferrous lextron. The attending physicians are immediately notified if the hemoglobin is below 65% and red blood count below 3,000,000. Blood transfusions are given in selected cases. This method definitely hastens complete recovery and lessens chances for any delayed morbidity.

CONCLUSIONS

The many methods reviewed in this paper emphasize that prophylaxis of puerperal morbidity or sepsis is concerned with the entire period of pregnancy, that it involves many factors and many principles, and that close adherence to these are of utmost importance. Prophylaxis is much more complicated than the administration of certain drugs to cover up mismanaged and faulty technic in obstetrical delivery. However, the newer drugs certainly

have saved many morbidities and mortalities that otherwise would have occurred.

Prophylaxis of puerperal morbidity is far more important than the treatment of puerperal sepsis, as the first precludes the second. Adherence to aseptic technic at delivery is not sufficient in itself to eliminate all cases of puerperal morbidity.

Prophylaxis of puerperal morbidity begins with the antepartum period such as control of leucorrhea, maintenance of an adequate blood picture, and an attempt to recognize potentially difficult labors before labor begins.

Prophylaxis of morbidity in the intrapartum period emphasizes the necessity of eliminating sources of the organism that are known to cause puerperal disease, the necessity of handling of delivery with the least amount of vaginal examination and trauma to the birth canal, and proper timing of surgical interference.

The prophylaxis of puerperal morbidity in the postpartum period necessitates prompt recognition of blood loss, and a rapid replacement. The use of chemotherapy and antibiotics during or immediately after delivery in all potentially infected cases plays a very important part in the prophylaxis of puerperal morbidity. The synergistic action of the sulfa and antibiotics is suggested. The control of infection by these prophylactic agents broadens the safe employment of Caesarean section and reduces the need for Caesarean hysterectomy.

The routine use of the sulfa and antibiotics in all pregnancies is not recommended at this time.

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CORRECTION PLEASE!

In the original article "Routine Photofluorography of the Chest" by John A. Mart, M.D., Kenneth V. Powers, M.D., and Earl E. Barth, M.D. which was published in our April issue there were two errors. Both appear in the second column on page 237.

The third sentence in the column should read "Careful histories were taken, painstaking physical examinations were made, and routine laboratory procedures which included complete

blood count, urinalysis and Kahn test, were carried out".

In the bottom paragraph in the same column the third and fourth sentences should read "The films were studied very critically and if there was only a slight suggestion of an abnormal shadow or line, or of pleural or peribronchial thickening, the films were considered abnormal. This number did not include well defined calcified shadows, presumably first infection tuberculosis, or obvious heart disease.

In each instance the italicized words were omitted from the published article.

Detection Of Various Chest Lesions By Mass X-ray Survey

Dan Morse, M.D.
Peoria

In 1895 William Konrad Roentgen discovered the x-ray. With this invention the taking of x-ray pictures for medical diagnosis was first started. Mass surveys which bring about the x-raying of large groups of individuals and even entire populations, represent the highest development of this diagnostic procedure to date. During the past emergency the United States government demonstrated the practicability of taking thousands and thousands of chest x-rays. Millions of chest films have been taken on members or prospective members of the armed forces, and thousands of early treatable cases of tuberculosis have been referred by the Induction Stations to local authorities for management. Toward the end of the last war, this problem of mass x-raying was taken up by civilian agencies and public health departments.

This paper concerning the detection of the various chest lesions by mass x-ray surveys will be divided into three parts:

- 1.) A discussion of a few problems encountered in conducting large surveys.
- 2.) A few statistics
- 3.) Presentation of some cases.

One problem is the role of the private physician. No public health project, and this includes x-ray surveys, has ever been completely successful without enlisting the cooperation and aid of the family physician. The x-raying agency should report promptly to the family physician the complete findings on the survey x-ray; they should turn over to him for management all people with chest pathology discovered during the survey — this applies particularly to non-tuberculous disease; and they should work with the physician on all the discovered tuberculosis cases as to their disposition. On the other hand, the family physician should cooperate with the

x-raying agency, and should not hesitate to obtain consultation with chest specialists in his community or with the local chest clinic, in the matter of treatment of cases of tuberculosis, and also in making a diagnosis on questionable cases.

Another problem is the tendency in some communities to over-emphasize x-ray surveys. On the surface it seems that a procedure that effectively discovers early treatable disease could not be over-emphasized, but a tuberculosis control program encompasses many procedures. There is treatment, isolation of the contagious, public health legislation and education, and many other things that are all necessary. Over-emphasis of any one portion of a well balanced tuberculosis control program is almost as good as nothing at all. Mass x-ray case finding should be conducted in every community, but other things should not be entirely neglected.

Some of the other problems, which as yet have not been entirely solved are: How often should survey x-rays be taken on a group of individuals; how to persuade people to consent to have a chest film taken; and the handling of the follow-up which means months and even years of hard work on the part of physicians, nurses, and health authorities after each large survey.

This first chart shows various types of x-ray surveys conducted in Peoria during 1947. Nearly 60,000 films were taken which is a pretty good record considering that the population of Peoria is just a little over 100,000. However, many of these surveys reached into the surrounding communities. It is noted that the highest incidence of total cases of tuberculosis and other pulmonary pathology is in those who are sick, such as hospital admissions, people attending a clinic, persons on relief, and those who are contacts of active cases.

Presented before 108th Annual Meeting Illinois State Medical Society, Chicago, May 10-12, 1948.

Chart No. 1
X-RAY SURVEYS — PEORIA, ILLINOIS — 1947

Name of Survey	No. of films taken	Pulmonary TB		Other Pathology	
		No.	%	No.	%
Community Clinic	96	4	4.1 %	11	11.5 %
Contacts Survey	490	14	2.85%	—	—
Relief Applicants	158	3	1.89%	14	8.85%
Other Surveys	306	4	1.3 %	4	1.3 %
Industrial & Community	38,255	140	.36%	289	.75%
Bradley Univ.	3,488	12	.35%	10	.28%
Pre-Employment	10,626	35	.33%	69	.65%
High School	187	—	—	5	2.7 %
School Employees	696	—	—	3	.44%
Hospital Admissions	5,085	Total significant chest lesions		261	5.13%
TOTAL	59,387	212	.39%	666	1.12%

In an analysis of the status of the 212 total cases of tuberculosis found during 1947 in the total x-ray surveys, 31 are considered active, either because of a positive sputum or the demonstration of x-ray progression of the disease, 51 are classified as questionably active and need further study before their status can be determined, and 130 are thought to be arrested.

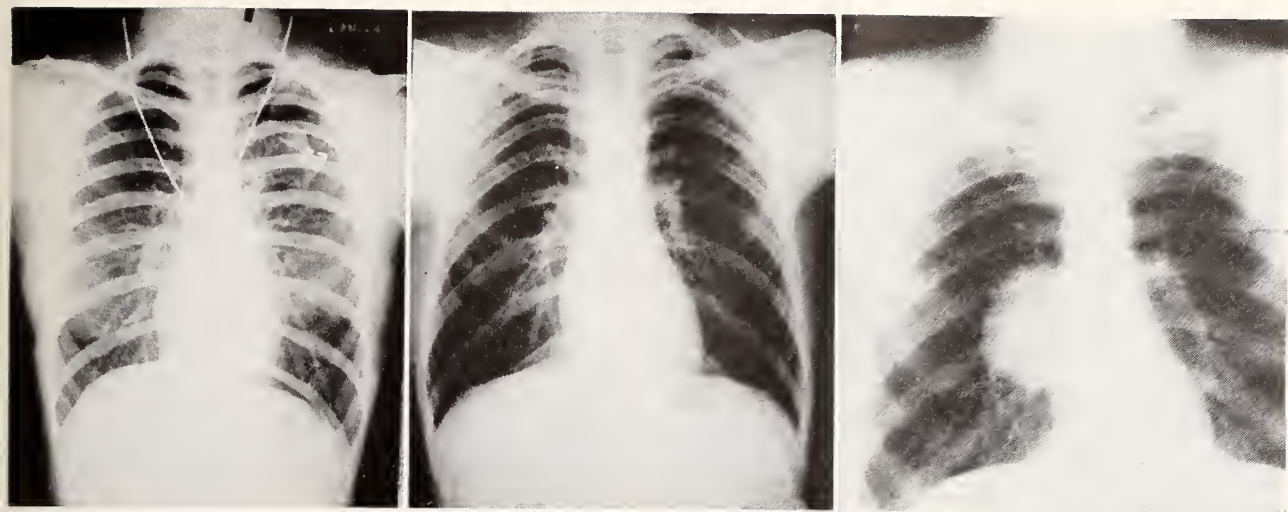
Chart No. 2 shows the breakdown of the industrial and community wide survey conducted in Peoria with the help of the State Health Department during the summer and fall of 1947.

Chart No. 2			
INDUSTRIAL & COMMUNITY SURVEYS — 1947 — PEORIA, ILL.			
Total x-rays:	Caterpillar	16,559	
	Other	21,696	
		38,255	
Total number of small films with suspicious pathology:		557	
TB Suspects:		268	
Active	6		
Unstable	38		
Arrested	96		
	140		
Normal chest and diagnosis incomplete or other conditions found	128		
	268		
Other pathology:	289	557	

Chart No. 3					
INDUSTRIAL & COMMUNITY SURVEYS — 1947 — PEORIA, ILLINOIS					
Tuberculosis status as of March 1948					
UNKNOWN CASES			KNOWN CASES		
			Total		
Active	)	Min.	1	1	
	)	M. A.	1	0	
	)	F. A.	2	1	
			4	2	
Un-stable	)	Min.	30	3	
	)	M. A.	2	0	
	)	F. A.	3	0	
			35	3	
Ar-rested	)	Min.	53	33	
	)	M. A.	2	3	
	)	F. A.	0	5	
			55	41	
			94	46	
% Unknown	Active	.01 %			
	Unstable	.09 %			
	Arrested	.144%			
	Total	.244%			
			Total x-rays taken: 38,255		

There are 557 miniature films showing suspicious pathology, and out of these, after preliminary follow-up work was performed, 140 showed evidence of some form of tuberculosis.

This chart breaks this down still further. Of the 140 cases of tuberculosis discovered, 46 were



CASE 1. Clothing shadow simulating pulmonary disease.

CASE 2. Eccentric position of great vessels.

CASE 3. Pulmonary tumor.

already known to exist at the time the survey was made, while 94 had never been diagnosed previously.

Chart No. 4

INDUSTRIAL & COMMUNITY SURVEYS — 1947 — PEORIA, ILLINOIS

Cases of tuberculosis discovered:	140
Minimal	121 — 86.4%
Mod. advanced	8 — 5.7%
Far advanced	11 — 7.9%

This chart gives us the breakdown according to the extent of the disease. In most surveys between 70 and 90% of tuberculosis discovered is in the minimal stage. If we wait for symptoms to develop before x-rays are taken, then the reverse is true, and the great majority will be in the advanced stages of the disease.

The upper half of chart No. 5 shows that there were 696 survey films taken on all teachers and school employees in the city during 1947. No cases of tuberculosis were found this past year, but we know that an annual film taken on these people will guarantee to the community that their children will not be exposed to tuberculosis at school. The lower portion of the chart shows the x-raying of the positive tuberculin reactors in the high schools of Peoria. During 1947 there were no cases of tuberculosis discovered. The incidence of tuberculosis among these people is quite small, but in the 7 years since 1940 when this program was started, 3 cases of active tuberculosis were discovered in these school children representing 8,841 indi-

Chart No. 5

SCHOOL EMPLOYEES SURVEY — 1947 — PEORIA, ILLINOIS

Total miniature films taken	696
Large films and further study recommended	24
Final diagnosis on retakes:	
Normal chest	21
Chest deformity, severe	1
Increased markings, further observation needed	1
Pneumonitis	1
	24

X-RAYS TAKEN OF POSITIVE TUBERCULIN REACTORS IN HIGH SCHOOLS OF PEORIA DURING 1947

Total number of films taken	187
Recommended for large films and further study	22
Final diagnosis on retakes:	
Normal chest	17
Increased markings, recommended further study	2
Old healed pleurisy	1
Refused retakes	2
	22

viduals tuberculin tested, of which 1,144 were x-rayed because of a positive tuberculin reaction.

On chart No. 6 we have the pre-employment survey conducted at Caterpillar Tractor Company. Nine cases of active disease were found in over 10,000 films taken during '47. This

Chart No. 6
PRE-EMPLOYMENT SURVEY — CATERPILLAR TRACTOR COMPANY¹

		Number	Number per- mitted to work
Total number of films taken:	10,626		
Total number of abnormal films:	458		
Increased pulmonic markings — not permitted to work in foundry		354	354
Evidence of definite lung pathology with findings as follows:	104		
Silicosis		4	3*
Excessive calcification		49	49
Pleurisy, healed		8	8
Chronic fibrosis		2	2*
Bronchiectasis		2	2
Healed lung abscess		1	1
Cystic disease of lung		1	1
Pneumothorax, chronic spontaneous		1	1*
Mediastinal Tumor		1	0
Pulmonary tuberculosis	35		
Active		8	0
Pleural effusion		1	0
Probably arrested		23	23*
Unclassified-TB to be ruled out		3	3*
*Periodic x-rays required			
% active tuberculosis to total films taken: .....	.08%		
% total cases tuberculosis found: .....	.33%		

chart is interesting from several angles. It demonstrates the excellent medical placement procedure carried out in a large factory. Many of these people with pulmonary pathology were permitted to work only because the Medical Department was able to place them in suitable jobs.

Chart No. 7
X-RAYS OF HOSPITAL ADMISSIONS —
1947 — PEORIA, ILLINOIS

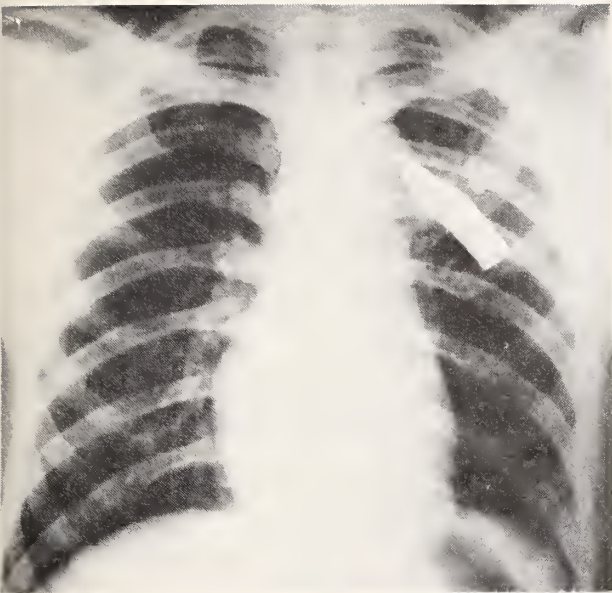
Total Hospital Admissions:	26,217
Total admission x-rays taken:	5,085
% x-rays to total hospital admissions:	19.4%
Total significant chest lesions discovered needing further x-ray studies:	261
% of abnormal films to total films taken: ..	5.13%

Chart No. 7 shows the hospital admission survey films taken in Peoria. The two largest hospitals have installed x-ray equipment to take films on all their admissions. The number of cases of tuberculosis discovered by this method is not known, as the follow-up work is done through the private physicians, and the only report sent to us is the number of significant abnormal films which required further study. Personally, I know that these admission films did uncover several cases of active tuberculosis. There were 26,217 total hospital admissions,

and only 5,085 admission films taken. Of course, it is impossible to take admission films on all people admitted, but a percentage of less than 20% seems rather low, and one of the chief purposes for taking these films, i. e. protection of nurses and hospital personnel, is cancelled by such a low percentage. This percentage could be raised considerably, if the hospital administrators would be a little more enthusiastic about carrying out this project, and if the doctors who admit patients to the hospital insist that they be given this extra service.

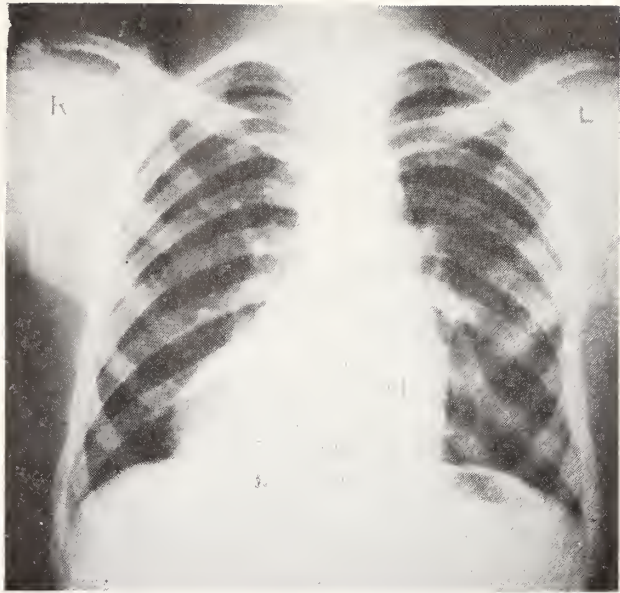
Chart No. 8 shows the Community Clinic survey. The total number of films taken — 96 — represents the positive tuberculin reactors out of a total of 250 admissions to the clinic during the year. If we consider this total number, the incidence of tuberculosis discovered (1.6%) is still quite high.

In the study of these charts, especially in regard to the Clinic and hospital cases, and additional information we have concerning the patients of private practitioners, we know that the unsuspected tuberculosis rate among the sick and ailing is quite high. This means that the new patients coming to a busy general practitioner will have a high incidence of pulmonary tuberculosis. This incidence is present even in



CASE 4. Knife blade in lung. History of fight 5 years before x-ray.

those who do not complain of the ordinary symptoms generally attributed to pulmonary disease. Two of the more common, little known symptoms of early tuberculosis are vague indigestion, and easy fatigability. What can the doctor do about this? If he has a fluoroscope, the answer is obvious. Fluoroscopy of the chest of all new cases appearing in the doctor's office, regardless of complaints, will produce surprising results as far as discovering early cases of tuberculosis is concerned. One doctor, according to a recent American Review of Tuberculosis editorial², fluoroscoped all new patients who



CASE 5. Dextrocardia without situs inversus.

came to his office, and in 250 patients he found 7 active cases of tuberculosis, an incidence of nearly 3%. A physician in Peoria³ made the practice of routinely fluoroscoping every new case, and discovered in less than a year, 4 active cases of tuberculosis in patients who had no symptoms referable to pulmonary disease, and also 3 cases of primary pulmonary tumor, several cases of unsuspected metastatic disease, plus other cases of cardiac and aortic pathology. If a physician does not have a fluoroscope in his office, then it has been the practice of some, especially pediatricians, to do a tuberculin test on all new admissions, and x-ray all positive reactors. If this is not practical, then the physician should insist on an x-ray of anyone with symptoms that are not immediately attributed to some other cause, and in addition to insist on x-rays of those with a family history of tuberculosis, of those who have a history of recent contact with tuberculosis, and if desired he can go still further and refer to a local chest clinic for x-ray all those in the low income brackets.

Now what about the other lesions besides active tuberculosis that are discovered in these surveys? There were over 900 significant abnormal chest films besides tuberculosis discovered during the 1947 Peoria surveys.

Chart No. 9 shows the other pathology discovered in the recent industrial survey held at Peoria.

Chart No. 8 COMMUNITY CLINIC SURVEY — 1947 — PEORIA, ILLINOIS			
Total number of films taken:			96
Recommended to have retakes:		45	
Final findings on retakes:			
Normal chest	30		
Pneumonitis	2		
Chronic fibrosis	1		
Pleural adhesions	1		
Tumor of lung	1		
Increased markings, need further observation	5		
Refused retakes	1		
Bronchial TB Active	1		
Minimal TB Active	1		
Far Adv. TB Active	1		
Total Active TB	3		
Far Adv. TB? Activity	1		
% active tuberculosis to total films taken:		3.1%	
% total cases of tuberculosis found:		4.1%	

Chart No. 9
INDUSTRIAL X-RAY SURVEY — 1947 —
PEORIA, ILLINOIS

Other pathology found:	No.	Percent
Increased markings (need more x-rays)	12	.031
Fibrosis (bronchiectasis, asthma, etc.)	26	.068
Pneumonitis, acute	14	.036
Pleurisy (apparently inactive)	85	.22
Excessive calcifications	8	.02
Cystic disease of the lungs	2	.005
Diaphragmatic hernia	3	.007
Eventration of diaphragm	10	.026
Spontaneous paralysis of diaphragm	1	.0026
Lung abscess	3	.007
Pulmonary pathology unclassified (tuberculosis to be ruled out)	22	.057
Pulmonary tumor	10	.026
Emphysema	3	.007
Tumor of diaphragm	1	.0026
Silicosis — 1st stage	21	.054
2nd stage	5	.013
Shot gun pellets	4	.010
Severe chest deformity	20	.052
Cardiac hypertrophy	21	.054
Wide aortic shadow	5	.013
Dextrocardia	2	.005
Total	278	.72
Total x-rays taken:	38,255	

A review of 223,182 x-ray films taken at an Army Induction Station during the recent war⁴ shows significant non-tuberculous chest lesions as follows:

PERMANENT REJECTIONS —

Camp Shelby, Mississippi

Reasons for Rejection:	No.
Pleurisy, severe	221
Pneumonitis, severe	159
Spinal deformity	56
Passive congestion with enlarged heart	20
Marked cardiac hypertrophy	95
Bronchiectasis, proven	4
Pulmonary tumor	19
Post-lobectomy, with extensive fibrosis	2
Pneumothroax, simplex	28
Aneurysm or aortitis	51
Coarctation of aorta	1
Cystic disease of lungs	6
Subdiaphragmatic abscess or tumor	2
Pleural tumor	1
Knife wound of chest	1
Tumor of rib	6
Post-traumatic deformity	1
Unclassified pulmonary pathology	15
Gunshot wounds of chest	9
Tumor of diaphragm	3
Tumor of mediastinum	4
Acquired dextrocardia, severe	2
Atelectasis	3

Severe deformity of chest wall	4
Lung abscess	4
Pulmonary fibrosis	27
Post-thorocoplasty	3
Cardiac distortion	3
Patent ductus arteriosus	1
Emphysema, severe	10
Paralysis of diaphragm	2
Scapula deformity, severe	3
Diaphragmatic hernia, verified	6
Boeck's sarcoid	1
Hydropneumothorax	1

TEMPORARY REJECTIONS —

Camp Shelby, Mississippi

Reason for rejection:	No.
Pneumonitis, mild to moderate	179
Pleurisy, Moderate	21
Increased markings, moderate to severe	10
Childhood tuberculosis, active	6
Post-lobectomy	1
Rib fracture	1
Pulmonary cyst	1
Hilar gland enlargement	5

READINGS NOTED, NOT DISQUALIFYING —

Camp Shelby, Mississippi

Pleurisy, mild	720
Increased hilar markings	278
Enlarged heart, mild	167
Shotgun pellets in chest	240
Spinal deformities, moderate	216
Rib fractures, with callus	40
Rib resection, old, well healed	59
Azygos lobe, pronounced	15
Deformity of clavicle	13
Dextrocardia	33
Dextrocardia, acquired	3
Absence of pectoralis major muscle	3
Emphysema, moderate	3
Deformity of scapula, congenital	1
Hypertrophied nipples	1
Eccentric position of great vessels, marked	3
Calcium deposits in aorta, marked	1
Foreign bodies in chest wall	7

In summary:

First—mass x-ray surveys are excellent case-finding methods of discovering early treatable cases of tuberculosis to be used along with other tuberculosis control procedures.

Second—the sick and ailing are excellent material for case-finding surveys, and this includes new patients appearing in the doctor's office.

Third—although the chief use of x-ray surveys is tuberculosis case-finding, many other pathologies and abnormalities will also be discovered.

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The Psychiatrist's Role At The Illinois Children's Hospital School

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Child psychiatry is a very young profession. Rubinstein¹ after reviewing the literature prior to 1900 remarks that this specialty "as a branch of the broader discipline, has developed only within the last 40 years." Another author, Kanner², pointed out that before the beginning of the 20th century there was nothing which could be regarded as child psychiatry. This field as an active part of medical practice has, however, developed rapidly in the last twenty or twenty-five years. While William Healey did the primary work in juvenile delinquency and pointed the way to the development of child guidance clinics, it was not until the Commonwealth Fund financed and organized the experimental or demonstration clinics in the Twenties that the child guidance movement really took root.³ When Anna Freud⁴ published her first work in 1927, and other child psychoanalysts reported their work, the problem of emotional disabilities in children became more clear. In recent years child psychiatrists have been contributing to the fields of pediatrics and child welfare. At times they have felt omnipotent with their new knowledge while at other times they have realized their basic weaknesses.

The evolution of this discipline has been

one of trial and error, of learning new techniques and new methods of study. The concept of child psychiatry was gradually formulated and still remains with the same attitude of considering the approach to children's problems as a total one. The child guidance clinic team has always been, and probably will continue to be, made up of at least three members: the child psychiatrist, the psychiatric case worker, and the child psychologist. With the skills evolved from this teamwork relationship child psychiatrists became increasingly helpful to workers in other fields. As a result, not only they themselves but others in the field of medicine and child welfare have pondered the problem of their function. Should the child psychiatrist remain in his clinic, his ivory tower as it were, to be approached by those who wish help, or should he go out beyond this area? For the good reason of lack of personnel — for the number of these physicians in this country is still far too few for the demands made upon them — and because of their uncertainty as to their own function, the average child psychiatrist has remained in his clinic to diagnose and treat those behavior problems which were brought to him. However, with the increasing confidence that professional experience gives to the physician, he is beginning to work outside his clinic. By using his experience, training, and knowledge he now assists, as consultant, hospitals, schools, camps, orphanages, and other

Presented before the Physicians Association, Department of Public Welfare State of Illinois, 108th annual meeting, Illinois State Medical Society, Chicago, May 10-12, 1948.

institutions which treat, teach, or care for children.

This broadening of the orbit of child psychiatry has resulted in a number of developments which have extended the understanding of, and the work with, children. The American Orthopsychiatric Association has for the past few years arranged to have at its annual meeting a number of reports on the residential care of children and the problems associated with this type of care. New departments for children have been developed such as the department of pediatric psychiatry at the New York Hospital established by Milton J. E. Senn⁵. Margaret Ribble⁶ and others have made studies in the field of infant welfare with a view to understanding the basic personality development of the infant and young child. The psychoanalysts have been studying the multiple problems more intensively through the use of psychoanalytic techniques in the treatment of the child over a long period of time. Several schools of child psychiatry have developed sufficient flexibility in their concepts so that each has contributed to the thinking and techniques of the others.

The child psychiatrist appreciates the importance of understanding parents for he appreciates that the parent-child relationship is undoubtedly the most important factor in the child's development. His training, which is provided mainly in the child guidance clinic, includes training in adult psychiatry along with, or usually prior to, his work with children. He treats parents as well as children and knows that his understanding of children's problems enables him to deal more adequately and successfully with the parents who are anxious and concerned about their children's difficulties. He is constantly learning much from his other team members, the psychiatric case workers and the child psychologists. Psychiatric case workers have contributed immensely to the understanding of parent-child relationships and have done ~~valuable research in child guidance clinics~~. The ~~child psychologists have come a long way from the days of Binet and Simon and the early intelligence tests~~. The intelligence test today is understood as only a part of the study and appreciation of the child's problem and the clinical psychologist evaluates the test with an

infinitely greater clinical background than did his predecessors of ten, twenty, or thirty years ago. Today he also has the further aid of projective tests such as the Rorschach and Thematic Apperception tests, as well as educational achievement tests to evaluate the child's learning difficulties.

The history of child psychiatry and the training requirements of the child psychiatrist in the teamwork setting must also be understood for the proper appreciation of his role as a consultant in a residential institution for children such as the Illinois Hospital School for crippled children. This school developed out of the thinking, plans, and hopes of the workers in the field of child welfare in the State of Illinois. They recognized that while the State had an unusually good program for crippled children it did not provide for the care of certain more handicapped children, and that it was necessary to develop a hospital-school which could attack the problem of the educable physically handicapped child who was considered untreatable in other agencies. The State of Illinois, at the 64th General Assembly, through the enactment of House Bill 412, set up the Illinois Children's Hospital-School which was authorized "to provide for the establishment and maintenance of services and facilities for severely handicapped children." This Act directs the Department of Public Welfare to "establish and maintain services and facilities, including a hospital school, for the care and education of the physically handicapped, but educable children, and provide in connection therewith nursing and mental care and academic and related training to such children." According to the prospectus of the school, "The institution will endeavor to provide, through its own staff and the co-operation of other public and private agencies, the services of a combined hospital-school and home intended for the child who is educable but so severely physically handicapped as a result of cerebral palsy, muscular dystrophy, spina bifida, or other severely handicapping conditions that he is unable to take advantage of the system of free education in Illinois. Within the institution professional services will be rendered upon a departmental basis through a pediatrician as medical director, a director of nursing and physical therapy,

directors of education, occupational therapy and social service, a psychologist, and a dietitian." The Hospital-School was designed to provide restorative treatment and educational facilities on a twenty-four hour residential basis for selected children on a long term plan. It was set up for children whose educational and physical needs could not be met through available facilities. It was also emphasized that the Hospital-School would not duplicate the work of any existing services — medical, surgical, educational, or custodial. Ineligible for admission are the mentally defective, the acutely ill who suffer from such restricting conditions as cardiac ailments, tuberculosis, and acute poliomyelitis, those whose primary handicap is blindness, deafness, epilepsy, or chorea, orthopedic cripples whose need is for surgery, and children whose physical restoration appears to require only a short period of intensive treatment. It was fortunate for the Illinois Children's Hospital-School that a director was obtained who had had excellent training in social service administration as well as considerable experience in the administration of children's institutions.

The census of the school as of March 15th, 1948, includes the following conditions:

<i>Number</i>	<i>Diagnoses</i>
1	Acrocephaly with syndactylism
1	Amyotonia congenita
24	Cerebral palsy (2 with associated blindness 1 with associated deafness)
2	Chronic polyarthrits
1	Dermatomyositis
1	Dystonia musculorum
1	Friedreich's ataxia
2	Muscular dystrophy
1	Neurofibromatosis (Reckling- hausen's disease)
2	Osteogenesis imperfecta
10	Paraplegia 3 spina bifida 4 traumatic 1 myelodysplasia 1 transverse myelitis 1 Pott's disease
9	Post-poliomyelitis
<hr/>	
Total	55

In order to fulfill the obligation inherent in the Act of the legislature, as well as to approach the children with problems, with all the methods available, the superintendent asked for a psychiatric consultant from the Institute for Juvenile Research. The writer was appointed to this position in the spring of 1947. It was realized from the beginning that the consulting psychiatrist could serve the School better as staff consultant or staff psychiatrist than as psychotherapist to the individual child. By the condensing technique of sitting down with the staff at a conference every two weeks for two hours, the psychiatrist has aided the staff in helping them to understand the emotional problems of the children in their care. It was agreed from the start that when a child needed intensive psychotherapy he could be referred to the Institute for Juvenile Research on a regular application basis. To date only one child has been referred to the Institute and this appears to be a reflection of the value of the consulting psychiatrist's contribution through the use of the staff conference technique. The writer feels that in this way the psychiatric consultant can be of help to more institutions and therefore to more children than he could by attempting to study and treat individual resident children. Admittedly, it would be better if a full-time, or even a half-time psychiatrist were available at the Hospital-School. However, with the acute shortage of child psychiatrists this staff consultation technique was evolved and seems to be working out effectively. It is hoped that this technique may prove effective in helping large numbers of children.

Only cases of children with moderately severe emotional problems are presented at the staff conference. Usually one case is discussed and it is generally the child who has been at the Hospital-School for about three to six months. This is informally termed the initial psychiatric conference on the child. It should be stated here that the psychiatric staff conference is only one of many meetings held by the staff for there are a number of consultants as well as many problems to be worked out. Attending the conference are all the members of the staff who can leave their duties. These include the professional staff, house parents, and nurses who have close relationships with the child. The case worker begins

the discussion with a summary of the child's development, giving the background material that is essential as well as parental attitudes and other case work and psychological data which she has gained from a full case work evaluation of the child and his family. Each member of the staff then presents his views on the progress of the child, his evaluation of the problem, and suggestions for the future. The psychiatrist then attempts to formulate the psychological problem by using the background material as given by the case worker and to evaluate the personality damages which have resulted from the organic injury, appreciating the manner in which the child handles the everyday situation as presented by the different staff members.

The psychiatrist with his skills can provide some understanding of the child's defenses which include the child's approach to adults and to other children. The psychiatrist must also attempt to understand which staff members are anxious, hostile, ambivalent, or have some other problem in relation to the child, as well as to understand their problems with other staff members. He consults with certain staff members such as the case worker or the psychologist in their individual case work or play therapy with disturbed children. He acts much like the doctor of physical medicine who co-ordinates all members of the team in viewing the child as a total problem rather than as a problem of one specialized field. It is important to realize that the attitude one must maintain in the problem of handicapped children is exactly the same as it is in the problem of illness in any field of medicine and that is that the approach must be one of totality rather than one of specialized interest alone, forgetting other approaches and sometimes the patient himself. The staff conference technique has been of considerable value to the psychiatrist himself as well as to the staff. It is not unusual to hear a staff member remark that he had not realized other people were having the same trouble as he was having with a particular child. These conferences, then, are of some relief to many staff members in so far as their personal difficulties hamper their work with the children. This conference is especially important for new members of the staff who often have certain feelings of inadequacy during their first few weeks in the institution. Relieved

of these feelings, the new person is freed to continue his work with more ease and greater therapeutic courage.

The following case illustrates this procedure:

Case.—Joe was eleven years old when he was admitted on October 25th, 1946. He was accepted because he was too heavy to be carried out to the school bus and because his behavior made it difficult for his family to manage him at home. His physical restoration was considered complete at the time of admission. He had poliomyelitis at two years of age and was sent to a hospital for crippled children when he was six where he remained until he was eight years old. He was dismissed from this hospital because of his severe masturbation, soiling, wetting, sex practices with other boys, vile language, and lying. During the period of eight years to ten he was at a crippled children's home and was discharged from there because of his profane language, his disrespect for authority, and lack of consideration for the other children.

Joe has one sibling, a sister three years younger. His parents were divorced in 1946 after much quarreling and many separations. The family have not been too much interested in the boy and the mother has been alternately protective and rejecting. Joe had a normal birth and development except for some difficulty with toilet training which started at six months and was completed at one year. There was considerable rivalry with his younger sibling until recently. His physical diagnosis upon admission was post-polio paralysis involving the trunk, hip, and leg muscles which were practically powerless. His hands and arms were essentially normal. Joe weighed 164 pounds upon admission and was considered 92 pounds overweight. After about four months at the Hospital-School it was felt that he had begun to make some progress toward a better adjustment, but he still had many problems. He had become somewhat interested in the program, showed a need to be accepted, held onto adults, caressed them, and disliked sharing them with others. He wept easily. After being told that he had to lose at least 65 pounds, he became discouraged and refused to co-operate with this particular program. He was not accepted by the other children and often interfered with their activities. The social worker remarked, "He appears to be a handicapped child who has lost all desire to overcome his handicap." His attitude to the nurses was, "When do I get expelled from here?" The psychologist found him to be in the bright normal range. In school he was careless at first, but later seemed to mature somewhat and lost many of his cheating and childish habits.

At the staff meeting on March 11th, 1947, at which the psychiatrist was moderator, it was agreed that Joe was negativistic, obese, had a moderately severe handicap, violent mood swings, and little incentive for physical rehabilitation. At this time he felt rejected and found it difficult to form social relationships. He could not give to others and seemed to be quite self-centered. It was suggested that he be allowed to develop gradually his need to be felt wanted at the school. Accordingly

a continued attitude of tolerance along with firmness seemed indicated as the therapeutic task. Since he should have an opportunity to express his feelings to one adult who could see him regularly, a case worker agreed to treat him on a case work basis. The pediatrician had tried different medications in order to limit Joe's appetite, but all these measures had failed. The psychiatrist therefore felt that all medication should be discontinued and that it would be more important for Joe to have a positive relationship with the pediatrician than for her to be in the position of the demanding adult. The teachers, physical therapist, and OT workers, all concurred in the idea that in order to help Joe, one member of each department attempt to be Joe's "therapist" in that particular department. The psychologist stressed the opinion that there was no evidence to indicate any severe block to Joe's intellectual and emotional development.

On March 4th, 1948, the case was discussed again. By this time Joe had lost 60 pounds and his braces were ready. He had in the meantime consented to an operation which at the time of the staff meeting had already been performed—arthrodesis of the ankle. This was directly the result of his change of attitude, for he had refused surgery for many months after admission. Later, particularly after the case work treatment, he had asked for this surgery. He was now eager to attempt to walk and he became one of the most conscientious diet children on the ward. Another case worker had been seeing the mother and as a result of this treatment the mother's attitude had improved and she was visiting the School regularly. As might be expected, Joe has maintained a constructive relationship with his case worker. He now gets along better with the other children as well as with adults. He still has moody and negativistic attacks, but these are much less frequent.

Periodically, instead of the one case type of conference, three or four cases are presented for review, progress reports, further suggestions, and reformulations as they require. It is possible to give this thorough consideration of cases at the Hospital-School because the admission rate is necessarily slow and the total capacity of the institution, when completed, will be approximately ninety children. The turnover will probably be very slow because of the long term of treatment. At each visit to the school the psychiatrist also attempts to spend some time with staff members who wish to discuss with him their professional problems. In addition, he acts in a teaching capacity by discussing with the house parents some of the problems of the children in their care and the methods by which these problems can be handled. He takes part in panel discussions of various aspects of the problems seen at the Hospital-School, viewing the problems from the orientation of

his speciality. He makes suggestions for research and is occasionally called upon for advice regarding general policy. In order to justify a professional staff so diversified, so skilled and efficiently trained, and the expenditure of the money required to maintain this type of institution, research becomes a vital part of the program.

It is not the purpose of this paper to present a complete resume of the problems with which the Hospital-School has to deal. In a paper entitled, "The Management of the Emotional Problems of Crippled Children in a New Type of Institution," to be published in the Journal of the American Orthopsychiatric Association, the writer has elaborated upon a few of the problems that need study.

The psychiatrist is able to bring to a Hospital-School the techniques used in the diagnosis and treatment of psychologically disturbed children, techniques which include a full understanding of total staff responsibility. These are methods which are inherent in modern residential schools for the treatment of such children and have been generally followed by the staff of the Illinois Hospital-School. By staff responsibility is meant considering the staff as a total working team with each member as important as any other in his relationship to the children. Every employee is potentially a parent substitute to the child and it is for this reason that the psychiatrist emphasizes to the staff the necessity for total staff integration and responsibility. The psychiatrist's function in such a school consists in the main in attempting to understand the children's emotional problems and the inter-relationships of children and staff. In this capacity the psychiatrist hopes to contribute some portion of the total therapy necessary in the treatment of crippled children.

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Preliminary Report on Proposed Program for Visual Screening of School Children in Illinois

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Blindness**

The Illinois Society for the Prevention of Blindness, a voluntary health agency, has long been interested in school vision screening programs. During the days of the depression, the Illinois Society for the Prevention of Blindness harnessed the enormous manpower of the W.P.A. to carry on vision screening programs in Illinois schools. Carefully selected lay persons were trained and supervised to screen, with the use of the Snellen chart, 1,870,000 children during a five-year period. Ten per cent of these children were found to be in need of further eye care, and at least 82,000 of that 10 per cent received further attention for their eyes.

About two years ago, under the sponsorship of the Chicago Ophthalmological Society, the Illinois Society for the Prevention of Blindness began a trial demonstration with the use of the Massachusetts Vision Test, to determine its effectiveness for use in Illinois schools. The Society found this method very satisfactory and practical. The equipment itself can be purchased at little expense by the school, and lay persons can be trained to be technicians in a matter of a few hours. This particular method picks up more children with eye difficulties than did the use of the Snellen chart. It is also important that this screening method, while picking up more of the children with eye difficulties, does not result in a large number of over-referrals.

The Illinois Society found school authorities interested and cooperative in wanting to do something about establishing vision screening programs as a regular part of the school program. However, there were really three groups who were offering expert advice on screening

programs — the Illinois Society for the Prevention of Blindness, the medical, and the optometric. In some schools very bad situations developed and it was clearly evident that there could be no hope of a unified school vision screening program unless one could be developed which would have the support of both the medical ophthalmologists and the optometrists.

In the summer of 1948, after having determined that optometry could constructively participate in this kind of program, the Illinois Society for the Prevention of Blindness appointed a joint committee of medical ophthalmologists and optometrists to draft a school vision screening program to be used throughout Illinois schools. Two ophthalmologists and two optometrists were invited to serve, with full knowledge of their responsibilities. The ophthalmologists are Walter Stevenson, M.D., Quincy, President-elect of the Illinois State Medical Society, and J. R. Fitzgerald, M.D., Chicago, Secretary of the Chicago Ophthalmological Society. The optometrists are James Wahl, O.D., Anna, President of the Illinois Optometric Association, and Glenn H. Moore, O.D., Chicago, Secretary of the Illinois Optometric Association. This committee was given full responsibility for deciding method and policy, and will continue supervision of the program as carried out by the Illinois Society for the Prevention of Blindness.

Perhaps the most important part of this recommended school vision screening program is that there has been established a standard by which optometrists participating in the school vision screening program have agreed to refer certain children for further consultation to a medical ophthalmologist if such consultation is reasonably available. This standard provides

Prepared at the suggestion of Dr. Walter Stevenson and submitted with his approval.

that there shall be such referrals by the optometrists to the medical ophthalmologists if there is:

- 1. Corrected visual acuity of less than 20/30 in either eye.
- 2. Any obvious or questionable pathological alteration of the eye or its adenexa.

It has further been suggested that it would be well to have such referrals in "any case failing to measure up to 20/20 in either eye". The committee further recommends that the medical ophthalmologist should send to the referring optometrist a complete report of his findings, as well as to refer the case back for whatever optometric service can be rendered.

The complete recommendations of the joint committee on school vision screening have been accepted by the Illinois Optometric Association at its annual meeting on February 6, 1949, and by the Chicago Ophthalmological Society at its regular monthly meeting on February 21, 1949. The Illinois Optometric Association has appointed a certifying board to determine those optometrists who are willing to and can qualify for participation in the school vision screening program.

The Illinois Society for the Prevention of Blindness has committed itself to an extended service of establishing school vision screening programs throughout Illinois. The extent and speed with which the Illinois Society for the Prevention of Blindness can work is, of course, directly related to the additional funds which it can raise for this important program.

Without a doubt, school vision screening surveys, which should be carried on annually, can never be accomplished unless properly trained lay technicians can do the job as a regular part of the school program. The work of the Illinois Society for the Prevention of Blindness repre-

sents a new achievement in laying the foundation for a unified vision screening program, and one which has everything in its favor for success. For the first time, children in Illinois can be assured of coordinated effort to get them the best of eye care.

Following is a complete report of the committee's recommendations to date for a school vision screening program in Illinois:

- 1. The Massachusetts Vision Test is the method of choice for vision screening in Illinois elementary and high schools.
- 2. Screening should be done by properly qualified lay personnel. Ideally, it should be done by the teachers in the school, or it could be done by volunteers such as members of the P.T.A.
- 3. Screening should be conducted annually. Ideally it should be carried on at the beginning and end of the school year.
- 4. There shall be mandatory referrals by the optometrist to ophthalmologists if such consultation is reasonably available:
 - 1. If there is corrected visual acuity of less than 20/30 in either eye.
 - 2. If there is any obvious or questionable pathological alteration of the eye or its adenexa.

It is further recommended that there may be such referral in:

- 1. Any case failing to measure up to 20/20 in either eye.
- 5. The ophthalmologist should send to the referring optometrist a complete report of his findings as well as refer the case back for whatever optometric service can be rendered.
- 6. The vision screening technician shall screen all children wearing glasses with their glasses on. Any of these who fail the screening test shall not be given a notice to see their eye

Uncorrected Visual Acuity	Refracted	Corrected Visual Acuity
R.V. _____	R. _____	R.V. _____
L.V. _____	L. _____	L.V. _____
Medical attention is advised	Yes _____ No _____	
Glasses prescribed	Yes _____ No _____	(Please check)
Are orthoptics recommended	Yes _____ No _____	
Remarks:		
Name of child _____	Age _____	Grade _____ Sex _____
	Doctor's Signature _____	

specialist. Instead it shall be the responsibility of the public health nurse to get in touch with the child's specialist, advise him of the screening result and find out if the specialist wishes the child to return for further attention at this time. If this is desirable, the child shall be given a note advising him or the parents that an appointment to see his eye specialist is in order. The notice should not read that the child has failed the school vision screening survey.

7. There shall be no report on children who pass

the screening procedure.

8. Report to parents: "A limited visual survey made of indicates the need of a complete eye examination. Please take care of this at once." Signature should be that of the school principal or similar constituted authority.

Report for eye specialist to complete shall carry the notation to parents:

"It is requested you return this card to the principal after your doctor has completed it."

Extrarenal Azotemia and Lower Nephron Syndrome

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The lower nephron syndrome is a syndrome of diverse etiology, affecting essentially the cells of the tubules of the kidney, and especially those of the ascending loop of Henle and the distal convoluted tubules. Pathogenetically, the common factor is probably anoxia. The clinical picture depends on the degree of anoxia and the period of its duration, and is characterized by oligurea, often characteristic urine findings and azotemia, probably due to a non-specific reabsorption of the glomerular filtrate by damaged tubular epithelium.

The question of terminology for these varied states has received consideration. According to Bell¹, and others, a differentiation is made between a "true" extrarenal azotemia and the lower nephron syndrome. According to Lucké², a re-evaluation of the kidney findings in cases of extrarenal azotemia would show the recently described renal changes in most cases. Nor is it sure that the negative findings in some cases of

extrarenal azotemia may not be due to very early changes which are not apparent by our methods of study. For purposes of this paper, it will be considered that extrarenal azotemia and lower nephron syndrome are synonymous.

Historically, the picture was described separately for many conditions and by many authors. Such terms as acute Bright's disease, acute parenchymatous nephritis, acute tubular nephritis were used. When modern classifications of kidney disease were proposed, this entity was dropped and its significance generally forgotten. Kidney lesions were described in such disparate conditions as burns, hemoglobinurea, shock, acute infections, etc., as far back as 1823³, but it was not until Jeghers and Bakst, in 1937⁴, categorized our knowledge, described the basic mechanisms, and emphasized the comparatively minor pathology in the kidney under the term *extrarenal azotemia*, that the picture rounded into a definite pathologic and clinical syndrome. The syndrome was most lately and most completely described by Lucké², in 1946, who stressed

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especially the pathology. The importance of this syndrome and its application to present day clinical medicine remains to be emphasized, and this indeed is the purpose of this paper.

The lower nephron syndrome has been described in a multitude of clinical states, which cover the field of medicine in all its specialties. It concerns the dermatologist as well as the surgeon, the physical therapist as well as the internist. There seems to be no diseased state in which the syndrome may not occur. Its role may have to be assessed even in experimental and investigative medicine, as coloring certain results and findings. The condition, in varying degree, is ubiquitous in medicine.

Beside the organic lesions of nephritis, nephrosis, nephrosclerosis, post-renal blocks and structural anomalies of the kidney, renal lesions have been described in shock of all kinds, in peripheral vascular collapse⁵, in severe trauma to muscles (crush syndrome)⁶, in non-traumatic muscular ischemia⁴, in hemoglobinureas of varying etiology⁷, in hemorrhage⁵, burns⁸, heat strokes and heat exhaustion⁹, in utero-placental damage¹⁰, allergies, histamine intoxications¹¹, sulfonamide intoxications¹², in acidosis, alkalosis, dehydration states, in excess vomiting and diarrheas, in diffuse hepato-cellular damage, (hepatorenal syndrome), in conditions of excess protein catabolism, in vascular occlusions⁴, intestinal strangulation, obstruction, perforation and fistulae, in peritonitis⁵, in radiation and sunburn¹³, in freezing, extensive surgical intervention, diabetic coma, Addison's disease, acute pancreatitis, cerebral lesions, thyroid crises, reflex anureas⁴, etc. This list is certainly not complete but serves to demonstrate the ubiquity of the syndrome, and the need of watchfulness for its occurrence.

A common denominator in such diverse conditions is difficult of determination, and probably non-existent. However, certain mechanisms play an etiologic role so frequently that they may be considered fundamental. It should be understood that rarely is only one mechanism operative. More often, as will be later elucidated, a combination of mechanisms occurs. The sequence of their appearance, their intensity and their duration is of importance. A thorough knowledge of these factors in the pathologic physiology, and an awareness of their possible occurrence in disease states will often, by means of our ever increasing therapeutic armamentari-

um, prevent death. Early, the lower nephron syndrome is reversible. Later, the mortality rate is close to total.

The most commonly met mechanisms, alone or in combination are: 1—shock, 2—hemoglobinureas, 3—hemorrhage, 4—liver damage, 5—physico-chemical alterations in the blood, leading to acidosis, alkalosis, and dehydration, 6—increase in protein catabolism, 7—local renal disturbances.

1. *Shock*.—Kidney lesions and the clinical picture of the lower nephron syndrome have been described in shock notably by Moon and his associates. The kidney lesion will be described later. Suffice it to say now that the lesions are present mainly in the tubules which show varying degrees of degeneration of their cells, from cloudy swelling to complete destruction¹³. The pathogenesis of the lesion may now be discussed.

Several theories have been maintained. It has been suggested that the hypotension present in shock reduces the effective filtration pressure in the glomeruli and diminishes peritubular circulation, with resultant anoxia. It has been shown that in shock, when circulating blood volume is reduced to $\frac{1}{2}$ of normal, kidney circulation may be reduced to $\frac{1}{10}$ th, $\frac{1}{20}$ th or even less¹⁴. The role of anoxia is here apparent.

Nephrotoxic substances arising from injured tissue have also been implicated. These substances may injure the kidney during their excretion. Many substances have been mentioned, but the particular agent is unknown. Adenosine triphosphate has been isolated from ischemic muscle and has been shown to be nephrotoxic. Other nephrotoxic substances have been isolated in blood returning from ischemic muscles, but cannot be isolated from normal muscles¹⁵. Corcoran and Page have demonstrated a renal vasoconstrictor present in the plasma of shocked animals and humans¹⁶.

An increase in viscosity of the blood (hemoconcentration) is another probable factor in the production of oligurea in shock⁴. It limits the fluid available for excretory functions, increases protein catabolism, diminishes flow through the kidney and increases colloid osmotic pressure in the blood, thereby hindering filtration.

2. *Hemoglobinureas*.—These conditions, following intravascular hemolysis after transfusions, black water fever, paroxysmal hemoglobinureas etc., and myohemoglobinureas occurring in the crush syndrome, present a rather special problem. The crush syndrome first mentioned in the German literature after World War I, was rediscovered by Bywaters in crush victims during the London blitz in World War II. The mechanism whereby these conditions produce oligurea and azotemia is not entirely clear. It is true that in these conditions especially (but in other conditions initiating the lower nephron syndrome as well) there are precipitated in the lower nephron pigmented casts which block the tubules¹⁷. At one time it was considered that this caused the oligurea. It has been shown, however, that in most cases only 20% of the tubules are plugged. 80% of kidney tissue can normally carry on, however. It has also been demonstrated that it is improbable that hemoglobin or myoglobin casts would be precipitated unless there were previously damage to the tubule. Corcoran and Page state that oligurea and acidurea are necessary forerunners of hemoglobin precipitation in the renal tubule¹⁶. It has been shown, however, that products of hemoglobin degradation have an intense renal vasoconstrictive effect¹⁸.

It seems then that hemoglobinurea or myohemoglobinurea alone do not produce the lower nephron syndrome. Other factors present often are shock and anemia which damage the tubule. To this damage, hemo- or myohemoglobin, or their degradation products add further insult.

3. *Hemorrhage*.—Hemorrhage produces its effects in the kidney by many of the mechanisms concerned in shock — hypotension, decreased circulation through the kidney and by secondary shock itself. Basically, the mechanism again seems to be anoxia, either by itself or in combination with other factors. In gastro-intestinal hemorrhage, there may be the superadded factor of the digestion of massive amounts of blood, with resulting increase in the blood of protein derivatives which a damaged kidney cannot immediately excrete.

4. *Liver damage*.—Increase in N.P.N. of the blood has often been described in diffuse hepatocellular damage. The liver is the site of the deamination of amino acids, and the production of urea. It has been shown that the increase

in N.P.N. often is due to a rise in amino-acids, rather than in urea nitrogen. In some cases decrease and even absence of urea N has been demonstrated⁴. It may be that a differentiation between the azotemia of the lower nephron syndrome in hepatic damage and that due to a failure of deamination can be made by studying the partition of the N.P.N. into amino-acid and urea N. The factors of dehydration, hypotension, etc., in cases of severe hepatic damage have not been sufficiently stressed in the literature of the hepato-renal syndrome.

5. *Physico-chemical alterations in the blood*.—Such changes are found in many of the conditions associated with the lower nephron syndrome, as well as those associated with so-called extrarenal syndrome. The exact mechanism whereby these alterations cause renal damage is conjectural. It has been shown that hypochloremia per se has little renal effect, but that the oft concomitant dehydration is a factor. Hyponatremia on the other hand produces a diminished blood volume, and is therefore causative, again by means of dehydration⁴. Acid metabolites, such as lactate and phosphate from the destruction of tissues cause a decrease in alkali reserve, dehydration and an acid urine¹⁶. Lately, the role of excess potassium, which may be toxic to the kidney, has been discussed. It should be remembered that K, in excess amounts, is released whenever large numbers of cells are destroyed. In severe dehydration, when intra-cellular fluids as well as extracellular fluids are drawn into the serum (as in diabetic acidosis), serum K also rises and may be a factor in renal and other damage¹⁹.

6. *Increase in Protein Catabolism*.—Increased protein catabolism is readily apparent in such conditions as destruction of muscle masses, absorption of hemorrhage and exudates, and large necrotic areas, burns, etc. Azotemia here depends upon the inability of the kidney to eliminate nitrogen wastes. This inability is augmented by other factors which decrease renal function as mentioned above, and in burns especially by intra-vascular hemolysis and shock.

Less apparent is the increase in protein catabolism produced by dehydration per se, by septic inflammations such as pleurisy, pneumonia, peritonitis, severe surgical trauma, tissue injury in allergic states, starvation, hyperthyroidism,

fever and certain drug intoxications and sensitivities.

All of these factors are by themselves incapable of producing a significant degree of nitrogenous retention. They are, however, contributory; and interrelated with other mechanisms initiating the lower nephron syndrome.

7. *Local Renal Disturbances.*—It is evident that the vascular system of the kidney and even the tubules themselves are under the control of nervous and humoral factors. The role of reflex anurea from stimulation of the splanchnics is still not completely understood. Reflex anurea in the well kidney from pathology in the other diseased kidney is of relatively common occurrence. Reflex anurea from operations distant from the genitourinary tract may occur, as well as hysteric anureas and anureas following cerebral lesions.

The adrenal cortical hormones affect, by action on the tubules, sodium excretion and perhaps also urea excretion. The posterior pituitary hormone increases reabsorption of water by the tubule. Thyroxine is antagonistic to the posterior pituitary in this instance. The parathyroid hormone lowers the renal threshold for phosphate. The possible role of these factors in the lower nephron syndrome needs further investigation²⁰.

Another local mechanism, of some import, to be mentioned, is venous stasis in the kidney, from heart failure.

In a review of these basic mechanisms, it seems to me that the ultimate factor is probably anoxia, whether from vasoconstriction hypotension, or other more basic mechanism.

Pathology.—There is a need for categorization of our knowledge of the pathology of extrarenal azotemia and/or the lower nephron syndrome. In a review of the pathology as described in studies by various authors, Moon confirms the following pathologic picture¹³.

Grossly, the kidneys are normal in size or moderately enlarged and edematous. The capsule strips easily, the stellate veins in the cortex are engorged. The color varies depending upon the degrees of hyperemia and parenchymatous change. Hemorrhagic streaks are seen in the medulla and the cortical markings are obscured. Petechiae may be seen in the parenchyma and in the pelvic lining.

Microscopically, Moon states, there are varying degrees of changes within a regular pattern.

He describes hyperemia of the glomerular tufts and of the intertubular vessels and sometimes capillary hemorrhage. Amorphous material is seen in the capsular spaces. He describes degenerative changes in the convoluted tubules ranging from cloudy swelling to necrosis. He locates the changes as being "usually more pronounced in the upper segment, sometimes in the lower, but in general all portions of the convoluted tubules are affected." He describes hyaline, granular and often (but almost always in hemoglobinurea and burns) pigmented casts in the lower nephron. Debris, red cells and desquamated epithelial cells are present in the collecting tubules. The amount of edema varies.

Martineau and Hartman⁸ describe very much the same picture in 20 cases of human burns. They locate the pathology in the proximal convolution and the ascending thick segment of Henle's loop. They also describe vacuolar and hydropic degeneration, and necrosis in the collecting tubules.

Corcoran and Page¹⁶ describe hydronephrosis of nephrons and groups of nephrons due to casts. This condition is present in an insufficient number of nephrons to cause the clinical oliguria.

Bell and Knutson¹ differentiate a true extrarenal azotemia from an azotemia due to tubular injury. They describe cases of azotemia in dehydration states, in postoperative cases and in conditions of hypotension of which only 23% showed tubular damage on post-mortem examination. The cases in this study were all preterminal. Bell and Knutson admit that functional lesions may occur which are not microscopically demonstrable.

According to Lucké², the lesions in all cases are "essentially the same, degeneration, often necrosis, limited to the distal segments of the tubules, with brown casts of some heme compound in the distal segments and collecting tubules." In all cases described by Lucké, the pathology was described as minimal or non-existent in the glomeruli, proximal convoluted tubules and intermediate segments. Lucké quotes references for such selective damage in the reported pathology in crush injury, burns, incompatible blood transfusions, in utero-placental damage, in sulfonamide intoxication and after excess vomiting. In these cases, at least,

the lower nephron syndrome is a correct appellation.

Mallory²¹ concurs (in his examination of 60 cases of battle casualties, and a survey of 200 similar cases) with Lucké in the localization of the lesion, and adds that in his opinion dilatation of the proximal segments on microscopic section are artefacts in that in Zenker fixed material, in contradistinction to formalin fixed tissue, this is not seen.

Malamud⁹, et al, in a study of renal lesions in fatal heat stroke, also concur with Lucké in the localization of the pathology to the distal segment.

I have tried in this review of the pathology to show the major points of disagreement.

Clinical Picture.—The symptoms of the lower nephron syndrome are always superadded to those of the initiating disease. The chief features seem to be fatigue, drowsiness progressing into stupor, and coma. The usual clinical manifestations of renal uremia such as dehydration, anemia, pallor, pericarditis, diarrhea, are rarely seen, probably because of the short duration of the disease. Muscular twitchings were present in one case, and uremic frost in another of Jeghers and Bakst. Vomiting is frequent according to Lucké. Convulsions are uncommon.

Oligurea is of constant occurrence, and often proceeds to anurea. The oligurea is usually noted in the first 24 hours, and persists despite a large intake of fluids and other measures to restore elimination. Urine output is usually less than 500 c.c. daily.

The urine is dark, sometimes smoky or frankly bloody, contains albumin, hemoglobin, debris, erythrocytes or shadow cells, hyaline, pigmented and granular casts even when there has been no known hemolysis.

The hemoglobinurea is usually transitory, lasting only one or two days. The albuminurea, however, usually persists through the disease and maybe longer.

The specific gravity of the urine has been variously described. Lucké² states it to be low. However, many case reports show a high specific gravity. Mallory believes a fixed specific gravity is of high diagnostic import²¹.

The mechanism of oligurea has been variously ascribed. That it is not due to tubular blockage is now generally agreed. A decreased renal circulation at a lowered pressure, does play a

part, but cases have been described where no such mechanics were operative. It is now considered that the chief cause of oligurea is an almost complete and non-selective reabsorption of the glomerular filtrate by the damaged tubule²². Actual visual observation of the nephron of a frog, whose tubules were poisoned with bichloride of mercury, showed active and even increased glomerular filtration in the presence of anurea. Rupture of damaged tubules may aid in the process²³.

The blood shows in all cases a rapid rise in N.P.N., and by the third day, the N.P.N. may exceed 150 mg.%. Urea N usually rises proportionately, except, as previously mentioned, in certain cases of hepato-cellular necrosis. The creatinine usually rises in proportion, but I have seen cases of extrarenal azotemia where the creatinine remains low. Bell¹ states differentiation of renal from non-renal azotemia by creatinine determination is of no value.

In some cases a high potassium and phosphate level in the blood has been reported, as has also a decrease in alkali reserve.

The physical findings consist of some slight to moderate edema. Acute pulmonary edema may arise and is of grave import. Edema of the face is uncommon.

Hypertension is one of the cardinal signs of lower nephron syndrome according to Lucké² and to Mallory²¹. After shock, the blood pressure rises to 150/90 or higher and is maintained during the disease.

Mortality Rate.—The mortality rate, once the condition is well established, is inordinately high. Lucké² reports a 90% mortality rate, 74% of these cases dying in the first eight days. The mortality rate in crush syndrome as reported by Bauer is also 90%. The course is usually brief (3-10 days) in fatal transfusions.

Treatment.—The treatment for the lower nephron syndrome should be as far as possible prophylactic. This means prompt and adequate therapy of shock, hemorrhage, electrolyte imbalance, whenever these may and do occur. Blood matching must utilize all the newer knowledge of subgroups and the various RH. factors. The treatment of diffuse liver damage and Addison's disease has been well elaborated and needs no discussion here. Alleviation of intestinal obstruction before electrolyte shifts, the immediate

and adequate therapy of burns to prevent loss of protein, and the constant attention to urine output, urinalysis, and blood chemistry, may bring earlier diagnosis and more successful treatment.

Once tubular damage has occurred, possible reversibility must be considered, and immediate attention given to the azotemia.

Specific etiologic factors in the lower nephron syndrome may require special treatment.

In the crush syndrome, Corcoran and Page¹⁶ suggest immediate bandaging of the limb to prevent sudden overwhelming absorption of toxic products. They also recommend the immediate use of intravenous diuretics such as 5-10 grams of sucrose, or 1 gram of sodium sulfate, together with 1-2 liters of sixth molar lactate solution.

Alkalinization has been recommended where myo- or hemoglobinurea are expected, but dangers of excess alkalinization after kidney damage have been stressed by English writers studying blackwater fever²⁵.

Renal decapsulation has been suggested, and decried by various authors. It is not clear that, in a possibly reversible condition such as lower nephron syndrome, decapsulation is always responsible for reported improvement.

Cases of relief by splanchnic block, high spinal or caudal anaesthesia have been reported^{26, 27}. A physiologic basis for such therapy is provided by the work of Franklin and his colleagues in England²⁸.

New hope has risen from the use of peritoneal lavage²⁹ in which for a time, the peritoneum is made to act as a dialyzing membrane to remove nitrogenous wastes, giving the tubules time to regenerate.

Another method of temporizing until repair may occur consists of diluting the toxic products in the blood by adding 1-2 liters of salt solution to other intravenous therapy in order to produce edema. This is necessarily a dangerous procedure for fear of pulmonary edema, and a careful and constant check on the lung must be done³⁰.

SUMMARY

The etiology, pathogenesis, pathologic physiology, clinical manifestations and therapy of the lower nephron syndrome have been presented. It is hoped that with sufficient emphasis to physicians in all fields of medicine, the syndrome will be expected in various disease states, earlier

recognized and earlier treated, in order that prevention or reversal of an otherwise highly fatal syndrome be accomplished.

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The Incidence of Intestinal Parasitic Infections in a Chicago Dispensary

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One working in the out-patient, gastro-intestinal dispensary of any medical school is always confronted with a large number of patients who return year after year with many complaints which seem difficult to overcome. These consist mainly of such vague general symptoms as chronic fatigue, lack of drive or ambition, indolence, fullness or discomfort under the left costal margin accompanied at times by palpitation, a sense of being unable to get enough breath, dull headache, inability to concentrate, poor memory, dull ache in the buttocks or thighs, and heavy tired legs. Also more definite gastro-intestinal complaints as poor appetite, nausea, a sense of fullness before much food is taken, belching, flatus, borborygmus, dull discomfort in the appendiceal area and secondly in the sigmoid area, food intolerances, occasional lower abdominal cramps with one or two loose stools but very often an obstinate constipation, vague rectal distress including pruritus and a sense of the rectum not being adequately evacuated.

The desire to find a way to make these patients self-sufficient, prompted us to make a search for types of infection which might sap one's vitality, other than those which are uncovered in the usual laboratory and physical examination.

The belief that the incidence of protozoan and helminth intestinal infection is higher in dispensary patients than is usually recorded, decided us in 1941 and 1942 to study 634 stool specimens from 296 patients in the gastro-intestinal clinic of the Central Free Dispensary of Presbyterian Hospital. Among statistical studies reported on the incidence of amoebiasis in this area are Hood¹, Spector², Rodaniche and Palmer³, Bundesen, Tenney, and Rawlings⁴, Bundesen⁵, and Tenney², and of intestinal parasitism in general in university students by Headlee^{7,8,9,10}, and Kmecz¹¹ in Longeliff State Hospital of Indiana. The conditions under which these studies were made differ from our own, in that our patients came from the gastro-intestinal clinic where the incidence should necessarily be higher than in the general population, since all of these patients were seeking relief from some type of abdominal discomfort or other symptoms referable to the intestinal tract.

Material and Methods. — In order to test our own efficiency with some of the methods ordinarily used in diagnosis, it was decided to use (a) direct smear with normal saline for trophozoites and precysts, and also D'Antoni's iodine for precysts and early cysts, (b) the centrifugation

zinc sulphate flotation method of Faust for cysts, and ova of other parasites, and (c) the stool culture using Cleveland and Collier media. The type of patient and the facilities of the dispensary made impracticable any attempt to have the patients pass stools at the dispensary for examination of fresh, warm stools. No attempt has been made to determine the relative efficiency of one stool examination, two stool examinations, three stool examinations, etc., as Faust and Sawitz¹² and Sawitz and Hammerstrom¹³ have so ably shown that the examination of ten to twelve stools with direct smear, hematoxylin stain, and centrifugal zinc sulphate flotation yielded an efficiency of only seventy to ninety percent even when normally passed stools, stools obtained with saline purging, and material obtained by proctoscopic examination after three large saline enemas were all used. Not more than three stools from any patient were examined and if the first stool was positive for *Endameba histolytica*, no more stools were examined. It is admitted that our studies obviously did not reveal the total number of parasites and protozoa present because (a) the number of stools studied per person was inadequate, (b) all were normally passed, cold stools, (c) no proctoscopic studies were correlated, (d) none of the stools were obtained by saline purges which brings material direct from the cecum where the incidence of *Endameba histolytica* is greatest, (e) no saline enemas were given to bring mucus direct from the cecum, (f) no animal inoculations were done, and (g) no complement fixation tests were done for *Endameba histolytica*. Therefore, this represents merely the efficiency of the laboratory examination of one to three stools as a diagnostic procedure.

Results. — The results of our series were as follows:

296 Patients Examined

<i>Parasites</i>	<i>Percentage</i>	
	<i>No.</i>	<i>of</i>
	<i>Pts.</i>	<i>No. Exam.</i>
<i>Endameba histolytica</i>	35	11.8
<i>Endameba coli</i>	49	16.5
<i>Endolimax nana</i>	36	11.9
<i>Diendameba fragilis</i>	12	4.1
<i>Iodameba buetschlii</i>	2	0.7
<i>Giardia lamblia</i>	12	4.1
<i>Trichomonas hominis</i>	10	3.4
<i>Enterobius vermicularis</i>	3	1.0

<i>Oxyuris incognita</i>	4	1.3
<i>Hymenolopis nana</i>	1	0.3
<i>Trichocephalus trichyuris</i>	1	0.3
<i>Tenia saginata</i>	2	0.7
<i>Strongyloides</i>	1	0.3

634 Stools Examined

<i>Parasites</i>	<i>Percentage</i>	
	<i>Stools</i>	<i>of</i>
	<i>Positive</i>	<i>No. Exam.</i>
<i>Endameba histolytica</i>	55	8.7
<i>Endameba coli</i>	79	12.5
<i>Endolimax nana</i>	62	9.8
<i>Diendameba fragilis</i>	15	2.4
<i>Iodameba buetschlii</i>	2	0.3
<i>Giardia lamblia</i>	21	3.3
<i>Trichomonas hominis</i>	14	2.2
<i>Enterobius vermicularis</i>	4	0.6
<i>Oxyuris incognita</i>	4	0.6
<i>Hymenolopis nana</i>	4	0.6
<i>Trichocephalus trichyuris</i>	1	0.16
<i>Tenia saginata</i>	2	0.3
<i>Strongyloides</i>	1	0.16

30 N. Michigan

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CASE REPORTS



Acute Infectious Polyneuritis (Guillain-Barre Syndrome)

Associated With Methemoglobinemia Possibly Due
to Nitrates in Drinking Water

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Since 1892 when Osler first described a condition he designated as "acute febrile polyneuritis," much attention has been given at various times to diseases characterized by symmetrical paralysis of acute onset. When in 1916, Guillain, Barre and Strohl turned emphasis upon an albumino-cytological dissociation in these diseases, the concept of a distinct syndrome was developed. In 1936, Guillain presented his view that this syndrome had a specific neurotropic virus as its etiological factor, which would eventually be established through animal inoculation. However, it is still a question whether the symptoms may not be produced by various etiological agents. It is our intention here to report a case which presents

the picture of a Guillain-Barre syndrome in combination with a methemoglobinemia.

Two weeks previous to admission, the patient returned from a seven day vacation in northern Wisconsin, where he drank well water and possibly unpasteurized milk purchased at the local grocers. On the way back to Chicago, he had 12 loose, watery stools unaccompanied by cramps or vomiting. He took some milk of magnesia and the condition subsided. The patient then felt well and returned to work for six days. The next day, one week before admission, he noticed tingling in his fingers and the bottom of his feet. In the next two days, he became very weak in his legs, especially the ankles, and found that they would give way under him when he

21 - 14 days before admission	1 week asymptomatic vacation. Drinking of well water and possibly unpasteurized milk
14 days before admission	12 loose watery stools
13 - 8 days before admission	Patient felt well; went to work
7 days before admission	Tingling in fingers and bottom of feet
6 days before admission	Weakness of legs, especially ankles
5 days before admission	Pain in low back region
5 days before admission	Weakness and loss of control of hands. Thickened speech
to time of admission	Difficult breathing

attempted to walk. He was now unable to get out of bed and developed pain low in his back. Further, in the five days before admission he lost control of his hands, his speech became thickened and he had difficulty breathing, but no difficulty swallowing. He had no tinnitus, vertigo, fever or chills.

SUMMARY

Inquiry into the patient's past history disclosed that he was employed as a porter in an office building for the past 11½ years. He had influenza at 24 years of age and malaria at 18. Three years ago, he was diagnosed as having tuberculosis and spent one year in a sanitarium. About six months ago, he had severe aching pain in his epigastrium and has been treated with powders since that time. He had no contact with arsenic or lead, did not smoke, drank alcohol only occasionally and took no drugs.

Physical examination upon admission revealed a well developed, well nourished white male 52 years of age, who spoke with difficulty and was breathing with the aid of his accessory abdominal muscles with no intercostal component. His temperature was 99, pulse 98, blood pressure 158/88 and respiration 16 per minute. His skin and nails were cyanotic. His pupils were round and regular and responded well to light and accommodation. His eye movements were normal and there was no nystagmus. The fundi showed normal cupping of the discs. There was no facial paralysis or deviation of the tongue. Examination of the neck disclosed no masses or glands. There were a few coarse rhonchi in the right chest posteriorly and bilateral apical rales. The heart was of normal size with the right heart border at the right edge of the sternum and the left heart border 2 cm. within the mid-clavicular line in the 5th interspace. The mechanism was sinus and there

were no murmurs. The kidney, liver and spleen were not palpable. There was marked generalized weakness of all four extremities. Neurological examination revealed normal sensory appreciation of pin-prick, cotton and hot and cold. The deep reflexes were uniformly absent with no plantar response at all. The abdominal reflexes were absent and there were no pathological reflexes. Proprioception was normal. Vibratory sense was somewhat diminished, 15 seconds in the arms and 10 seconds in the legs. There was a marked ataxia of both arms and legs. Tenderness to pressure on both calves was marked.

Urinalysis was negative. The leucocyte count was 14,700 with 75% polymorphonuclears, 24% lymphocytes and 1% eosinophils. The erythrocyte count was 5.53 million and the hemoglobin 18 grams. The color index was .95. Three lumbar punctures were performed. One on the day of admission, the second the 4th day of hospitalization and the third, the 10th day of hospitalization. The first revealed normal dynamics with an initial pressure of 21 mm. an excursion to 30 mm. upon jugular pressure and to 29 mm. with abdominal pressure. The cell count was 2 per cmm; the globulin negative; the chlorides 860 mgm and the sugar 93. A culture was taken which showed no growth on blood sugar after 48 hours. The second spinal fluid examination had 2 cells per cmm. There was a slightly positive pandy, a negative globulin but a total protein of 185 mgm%. The sugar was 107.5 mgm%. A culture again was taken and again there was no growth. The third spinal tap disclosed a cell count of 0 cells per cmm. The pandy was 2 plus, the globulin 1 plus and a total protein of 249. Spinal fluid Wasserman was negative. A blood Kahn was negative.

Blood chemistry determination showed a total protein of 8.20; albumin of 4.85 and globulin of 3.35 with an A/G ratio of 1:14 — 1. A brucellosis agglutination was negative. The sedimentation rate was 21 mm. in one hour. A portable film of the chest revealed extensive bilateral infiltration into the upper thirds of the lung fields with calcified nodes in both hila and a well calcified Ghon complex in the left lung base. The appearance was most suggestive of advanced tuberculosis.

Immediately upon admission, O₂ through a nasal catheter was administered. During the first five days of hospitalization, he complained from time to time of mild aches in the legs; his temperature varied between 99-100°. On one occasion he did cough up blood tinged sputum, but ceased to cough after that time. On the fifth day of hospitalization the patient was started on 50,000 units of penicillin every three hours prophylactically. This penicillin was continued for eight days. During the first week in the hospital the only improvement noted was a diminution of the ataxia of the arms. His speech remained hesitating and slurred. However, on the ninth day after admission, it was noticed that the patient definitely had more power in his arms and legs and was able to inspire deeply with good intercostal expansion. Because the patient's cyanosis persisted out of proportion to the degree of respiratory difficulty, and in spite of continuous O₂, a methemoglobinemia was suspected. A methemoglobinemia determination was done and with spectroscopic examination showing a heavy absorption band in the methemoglobin zone. After 10 days of hospitalization while the patient was regaining some strength the mild aches in his legs persisted and he developed a definite left facial paresis. The cyanosis cleared considerably, he continued slowly to regain strength and his speech became fluent throughout the next 10 days, but at no time was he able to get out of bed or feed himself and the calf tenderness persisted. By the 20th day of hospitalization the left facial paresis had completely cleared. He was now given 1.0 mgm/kilogram of methylene blue in the form of a 1% solution. No marked results were noted. At this time stomach washings were done and acid fast studies made. No tuberculin bacilli were seen on smear and guinea pig inoculation later proved negative.

Upon admission a diagnosis of poly-neuritis of unknown etiology was made. A Drinker respirator was kept close at hand because of the absence of intercostal expansion. Lack of a history of contact with heavy metals or a vitamin deficient diet did not substantiate either factor as an etiological agent. Poliomyelitis was excluded because of the absence of meningeal irritation and lack of asymmetrical muscle spasm of segmental distribution with pleocytosis in the spinal fluid. Absence of localizing signs along with the normal dynamics of the spinal fluid and absence of xanthochromia did not suggest central nervous system tumor. Lues was excluded by a negative blood Kahn and spinal fluid Wasserman. While myxedema may exhibit an elevation of the spinal fluid protein without pleocytosis, there were no associated features of this disease. Similarly diabetic neuropathy may show an increase in the protein spinal fluid but in this case the urine showed no reduction. On the fifth day after admission, the results of the second spinal puncture with an elevated total protein were obtained. The case was reviewed and a diagnosis of Guillain-Barre syndrome was made with the following points brought sharply in focus.

1. Parasthesia of the hands and feet
2. Symmetrical weakness of arms and legs
3. Intercostal paralysis
4. No objective sensory changes
5. Absent deep reflexes
6. No abdominal reflexes
7. No pathological reflexes
8. Low grade temperature
9. Normal dynamics in spinal fluid
10. Albumino-cystological dissociation in spinal fluid

The symptoms of ataxia and the subsequent transient facial paresis were also explained by this diagnosis. Guillain had remarked that "changes in deep sensibility may explain the ataxia that is sometimes present." The development of a left facial paresis recalled to mind the number of cases of polyneuritis in which difacial paresis had been reported with hyperalbuminosis of the spinal fluid. However, there was no preceding history of recent diphtheria or upper respiratory infection as sometimes precedes the onset of a Guillain-Barre Syndrome. While Guillain has remarked that "cases with hyperalbuminosis with an albuminoid content of from

0.3 to 0.4 gm. do not belong to the syndrome or must be regarded as instances of an abortive form," most investigators do not now subscribe to this view and, therefore, regard the level of 249 mg. in this case as adequate for diagnosis.

In view of the fact that the symptoms and signs of a Guillain-Barre Syndrome and a proven methemoglobinemia coexisted in a patient in which no other etiological factor could be found for the condition, we believe that relationship existed between the two in this case. Further, because of the patient's history of drinking large amounts of well water while vacationing it was assumed that the methemoglobinemia was possibly on the basis of a high nitrate intake. The toxic effects of a high nitrate water results from the reduction of a nitrate to a nitrite by bacterial action. The patient's diarrhea may be related to this process. Emergency treatment of methemoglobinemia consists in intravenous injection of 1.0 mgm. of methylene blue per kilogram of body weight in the form of a 1% solution. In our case the dye was injected late when the patient was well on the way to recovery and no dramatic results were expected or obtained. The fact that no other cases were reported from that vicinity, or in the patient's family who were vacationing with him might possibly be explained partly by the fact that the patient had far advanced pulmonary tuberculosis and was already in a debilitated condition and partly by his admission that he consumed much more water than other members of his family.

Methemoglobinemia on the basis of ingestion of water with high nitrate content was first reported from Iowa in 1945. Cases have now also been reported from Illinois, Kansas, Nebraska, Michigan, Oklahoma, Canada and Belgium. All the cases reported have been in infants and it was assumed that adults and children old enough to take a solid diet were not endangered by the presence of nitrates in drinking water. The cases reported have been from

rural districts where water supplies are obtained from relatively shallow wells and toxic amounts of nitrates are present. We have presented the case of a 52 year old white man who after vacationing in Northern Wisconsin, where he drank excessive amounts of well water, developed a methemoglobinemia with the symptoms and signs of a Guillain-Barre Syndrome. However, the well water in the vicinity of Wisconsin in question was analyzed and found to contain 0.000 ppm nitrates. This analysis seemed to refute the theory of a nitrate etiology for the methemoglobinemia. It is accepted that water containing less than 10 parts/million nitrates is harmless; between 10-50 parts/million should not be used and over 50% water is hazardous and may produce methemoglobinemia with severe cyanosis. Since there was excessive rainfall between the time that the patient drank well water and the time that the analysis was made it is possible that much of the nitrate content was washed away.

We have established the presence of a methemoglobinemia in a case with a clinical picture of a Guillain-Barre syndrome. A nitrate etiology for the methemoglobinemia, while possible, had not been definitely proven.

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Acute Pneumococcal Epididymitis

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Chicago**

Acute epididymitis caused by the pneumococcus is rare enough to be of interest. In 1941, one of us (N. J. H.) reported a case of epididymitis in which pneumococcus type X was found. Recently we have observed a similar case.

R. M., white male, aged 34 years was admitted to Presbyterian Hospital, February 13, 1948. His only complaint was a right scrotal swelling and severe scrotal pain of two days' duration.

Past history: At the age of 12 years, he was successfully operated upon for congenital exstrophy of the bladder. In 1943, an acute, painful enlargement of the right scrotum developed, associated with a persistent urethral discharge. A diagnosis of gonorrhea was made and penicillin was given. The urethral discharge ceased and the scrotal swelling completely subsided. Syphilis was denied.

Present history: Two days prior to his admission to the hospital, pain and swelling developed in the right scrotum, increasing progressively in severity. There had been no history of recent respiratory infection nor of instrumentation of the urethra.

Physical examination: Revealed a well-developed and well-nourished white male of 34 years of age. The temperature was 101.2 F., and the blood pressure was 120/80. The general physical examination was negative except for poor dental hygiene and numerous carious teeth. There was a suprapubic scar measuring 6 x 11 cm. The external genitalia revealed a complete epispadias. The right scrotum measured 18 x 10 x 10 cm., and was markedly inflamed, tense, hard and the normal scrotal folds were absent. The mass did not transilluminate light and was not fluctuant. The left testicle, epididymis and vas deferens were normal. The rectal examination revealed a grade 1 enlargement of the prostate.

Laboratory studies: The blood count showed

hemoglobin 12.5 grams, erythrocytes 4.02 million, and leucocytes 18,650. The urine showed albumin 1+; erythrocytes 0-1 per cubic millimeter, leucocytes 5-10 per cubic millimeter. The Kahn serology test was negative, and blood non-protein-nitrogen was 36 mgm. per cent. Repeated smears from the urethra were negative for gonococci, and gonococcus complement fixation test was negative. Repeated urine smears, urine cultures, sputum examinations, and guinea pig inoculations of the urine were negative for tubercle bacilli.

The chest x-ray revealed normal lung fields and heart shadow. A plain x-ray of the genitourinary system showed both kidney outlines enlarged and a wide separation of the symphysis pubis. The excretory pyelograms revealed the right renal pelvis and calyces to be slightly dilated and a normal left renal pelvis and calyces. There was a smooth outline of an intact urinary bladder.

Operation and clinical course: Elevation of the scrotum and hot packs gave some relief of the pain. However, the swelling and inflammation persisted and the patient ran a septic temperature of 100.1° to 102.2° for seven days. On February 20, a fluctuation was elicited in the right scrotal mass. The following day a longitudinal incision 5.5 cm., in length was made in the anterior right scrotum and a large quantity of purulent material was evacuated from the epididymis. The testis was normal. There was marked induration and inflammatory reaction in the surrounding scrotal structures. The cavity was packed with vasoline gauze and the incision left open. Cultures of the purulent material revealed a pneumococcus, type III. The gauze packs were removed on the fourth post-operative day. The post-operative course was uneventful, the swelling and induration rapidly subsiding. The patient was discharged from the hospital with the incision healed on the ninth post-operative day. A follow-up examination two weeks after discharge showed a complete healing

From the Department of Urology, Presbyterian Hospital.

TABLE 1

AUTHOR	Age	Primary Disease	Metastatic lesions	Type X Organism	Diagnosis	Treatment	Result
Landor and Sreenivasan	25 yrs.	Bilat. lobar pneumonia	Bilateral involvement epididymides	Type 1 pneumococcus	Bilateral suppurative epididymo-orchitis	Incision and drainage	cured
Landivar	20 months	Pneumonia	Right epididymitis	Pneumococcus	Right suppurative epididymitis	Aspiration; incision and drainage	cured
Landivar	28 yrs.	Subscapular abscess	Left epididymis	Pneumococcus	Left suppurative epididymo-orchitis	Incision and drainage	cured
Jasonna	3 yrs.	Broncho-pneumonia; Empyema	Left epididymis	Pneumococcus	Left suppurative epididymitis	Aspiration; incision and drainage	cured
Hendricksen	50 yrs.	Bronchitis	Bilateral epididymitis; Suppurative arthritis rt. knee	Type 111 pneumococcus	Bilateral suppurative epididymitis	Incision and drainage	death
Huard and Boutareau	Not given Adult	Traumatic injury	Left epididymis	Pneumococcus	Left suppurative epididymitis	Epididymectomy	cured
Valerio	36 yrs.	None	Right epididymis	Pneumococcus	Right suppurative epididymitis	Incision and drainage	cured
Freville and Ngujenvan-Luong	30 yrs.	Right lobar pneumonia	Bilateral involvement epididymides; Rt. wrist	Pneumococcus	Bilateral suppurative epididymitis; suppurative arthritis rt. wrist	Incision and drainage	cured
de Leon	7 mos.	Not determined	Not determined	Pneumococcus; B. influenzae	Suppurative rt. epididymitis Suppurative arthritis rt. ankle; meningitis.)	Conservative	death
Heckel and Preston	66 yrs.	Urethritis following instrumentation	Right epididymis	Type X pneumococcus	Right suppurative epididymo-orchitis	Right epididymectomy and orchiectomy	cured

of the incision and regression of the scrotal swelling.

In a review of the literature, ten cases of pneumococcus epididymitis have been collected. Some authors report orchitis due to the pneumococcus but do not mention the epididymis. In 1894, Prioleau reported a case of suppurative orchitis following lobar pneumonia in which the pneumococcus from the genital lesion was morphologically similar to that in the sputum. It is possible that he was dealing with an epididymo-orchitis in view of the relative rarity of central abscess of the testis. Jensen states that acute epididymitis may be produced by the pneumococcus. Buckingham quotes Mills in reference to epididymitis following pneumonia, but a careful study of Mills' paper reveals no

mention of epididymitis. Kranzfeld reports an epididymo-orchitis following pneumonia, but without identification of the organism. Campbell in a report of 3606 cases of epididymitis from Bellevue Hospital, New York, had one case following pneumonia but did not identify the organism.

It is well recognized that pneumonia is actually a systemic disease and produces secondary changes in many organs due either to bacteriemia or to toxins. For instance, Mills in 1919 showed the presence of definite testicular changes during the pneumonic process and suggested toxins as a possible cause.

In the table is summarized the data on the ten collected cases. The ages varied from seven months to 66 years. In nine cases the pneumo-

coccus was found in pure culture. The influenza bacillus was associated with the pneumococcus in one case. The epididymitis occurred secondarily to lobar pneumonia in three cases; to bronchitis in two cases; to subscapular abscess in one case; to accidental trauma in one case; and in one case occurred spontaneously. In de Leon's case in which there was a right suppurative epididymitis, suppuration of the right ankle joint, and suppurative meningitis, the primary lesion could not be determined. In three cases the pneumococcus apparently invaded the epididymis through the urethra. It is evident in the other cases that the epididymitis was a metastatic lesion. The epididymitis was bilateral in three cases; on the right side in five cases; and on the left side in two cases. The testicle was involved secondarily in four cases. Suppuration occurred in all of the ten cases.

Incision and drainage was the preferred method of treatment, being used in seven cases; epididymotomy and orchiectomy was performed in two cases, and conservative therapy followed in one case. There were two deaths; de Leon's case, due to meningitis, and Hendricksen's case due to pyemia.

Our patient compares closely with that of Valerio's. His patient also gave no antecedent history, except that of an anterior urethritis fourteen years earlier. The pneumococcus in the genital lesion of our patient was morphologically, culturally, and immunologically identified as Type III. It is probable that the entry of the organism was through the urethra, especially so in view of the epispadias with its gaping, shortened channel open to invading bacteria.

As is noted in our findings and confirmed by earlier authors, conservative therapy is of no avail in this disease. This is in marked con-

trast to the prevalent treatment in other types of gonococcal non tuberculous epididymitis. With the consideration of the clinical characteristics of this lesion, viz. rapid onset of severe local inflammatory reaction; lack of response to conservative therapy; and suppuration, it is obvious that the only procedure to be followed is incision and drainage at the earliest sign of suppuration. Early drainage will, in most instances, obviate the necessity for an epididymorchiectomy.

SUMMARY

1. A patient with right epididymitis caused by pneumococcus type III is reported.
2. The mode of entrance of the organism was through the urethra.
3. Ten cases of pneumococcal epididymitis have been collected from the literature.
4. The lesion may occur secondarily as a metastatic blood-borne lesion, or primarily by direct entrance through the urethra.
5. The preferred treatment is incision and drainage.

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Multiple Sclerosis and Pregnancy

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and J. L. Tavenner, M.D.
Dixon

Little is said in standard text books about multiple sclerosis complicating pregnancy. This follows naturally, for only 4 cases¹ have been reported in this country. We wish to present a case of multiple sclerosis complicating pregnancy in a 42 year old woman who was delivered by cesarean section. This patient's neurological disease was far more advanced than the other reported cases.

We experienced considerable anxiety in choosing an anesthetic. Since ether and chloroform are contraindicated,² and we feared using spinal anesthesia³ in the face of disease of the spinal cord, we chose local novocain infiltration supplemented with intravenous pentothal. This combination was most successful.

Mrs. M. S. was a 42 year old white para iii gravida iv whose neurological disease began three years prior to our first seeing her. Her past history was unremarkable. Her three children are young, normal adults. She had been seen in June, 1944, by a neurologist who made a diagnosis of multiple sclerosis. His observations included a spinal fluid examination. Her disease progressed rapidly. By June, 1945, she was unable to walk. Six months later, her speech became obviously defective. We saw her for the first time in the fifth month of her pregnancy. She was lying in bed with her legs and feet held in the extended position. There was almost complete loss of voluntary motion of all extremities because of weakness and spasticity. Emotional lability was demonstrated by her easily provoked smiling and crying. There was nystagmus on lateral gaze to the left. There was no diplopia or bitemporal pallor. Her speech was slow and jerky and the dysarthria was so marked that her husband had to interpret her statements for us. The tendon reflexes were hyperactive throughout. The abdominal cutaneous reflexes were absent. There was no response to plantar stimulation. Position sense and touch sensa-

tion were normal. The pregnant uterus was palpated and fetal heart sounds were heard. Because of the marked spasticity, the vaginal examination was unsatisfactory. The general physical examination was normal. Except for slight ankle edema on several occasions, her prenatal course was unremarkable.

She was admitted to the Dixon Public Hospital on June 2, 1947. A classical Caesarean section was performed June 7, 1947. The indication for section was generalized weakness and spasticity due to multiple sclerosis. Novocain infiltration was used until the peritoneum was opened. At this point intravenous sodium pentothal was supplemented. A normal girl, 6 pounds 3 ounces, was delivered. The baby cried immediately.

The postoperative course was completely unremarkable. There were no objective changes in her multiple sclerosis three months after delivery. A complete neurological examination at the end of this period revealed essentially the same positive findings that are mentioned above. The infant, who is being cared for by her adult sister, appears to be normal three months after delivery.

COMMENT

A case of pregnancy in a 42 year old woman with advanced multiple sclerosis is presented. Pregnancy did not alter the course of the disease. Local novocain infiltration supplemented with sodium pentothal was found to be a satisfactory anesthetic for cesarean section in this case.

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COUNCIL MEETING MINUTES



The regular March meeting of the Council was held at the Palmer House, Chicago, Sunday, March 13, 1949, with the following present: Hedge, Hopkins, Stevenson, Hughes, O'Neill, Harker, Hawkinson, Vaughn, Saunders, Blair, Peairs, Norbury, Hulick, English, Lane, Otrich, Coleman, Berghoff, Neece, Hutton, Neal, Leary, Cross, Hoeltgen, Bornemeier, Warren H. Cole, Edw. F. Stegen, Camp and Frances C. Zimmer. Minutes of last meeting approved.

SECRETARY reported on progress since last meeting. Told of development of Speaker's Bureau in office of James C. Leary, referred to meeting held at La Salle Hotel, February 27, when nearly 175 were present, and about 100 speakers were listed. Referred to literature distributed as prepared by Leary; popularity of speaker's cards, and many requests being received from all parts of country for same. Told of meeting arranged for Cincinnati, April 7 by United States Chamber of Commerce dealing with "Has your community kept pace with the Nation's Health Progress?" Urgent request that an official representative from this Society be at the conference. Told of response to appeal for members to pay A.M.A. special assessment, and this highly favorable, predicted that probably 90% of membership will pay same promptly. A number of counties already report 100% collections, and many others almost 100%.

National Conference of Presidents and other State Society Officers and the Annual Conference of County Society Officers (Grass Roots Conference) are scheduled for Atlantic City during annual A.M.A. Session. Recommends that official representatives be present at these conferences, as in the past. Secretary-Treasurer gave regular financial statement to the Council.

MOTION: English-Vaughn, that the title, Director of Public Relations Bureau, Illinois State Medical So-

ciety, be given to Mr. Leary. Motion carried.

MOTION: Camp-Neece, that Hutton be asked to go to Cincinnati meeting as the official representative of this Society. Motion carried.

MOTION: Vaughn-Blair, that assessment be sent to National Conference of Presidents and other State Society Officers, as has been done in the past. Motion carried.

MOTION: Lane-Blair, that the President attend this Conference in Atlantic City. Motion carried.

MOTION: Vaughn-Neece, that H. Kenneth Scatliff be the official delegate to the Conference of County Society Officers. Motion carried.

HOPKINS reported as president, telling of the many meetings he has attended and the apparent increasing interest on the part of laymen on compulsory health insurance and a growing resentment of Government encroachments on medical care, increased taxation, etc. Told of recent meeting at Galesburg Division, University of Illinois, the Department of Labor and Industrial Relations, at which compulsory health insurance was freely discussed. The Society was able to get representation on the panel discussion on compulsory health insurance, the speakers making fine presentations as opponents of the proposal.

Hopkins recently appointed F. Lee Stone, Chicago, as the official member of the "Committee of Fifty Three" as requested by the A.M.A. First meeting of this group was held in Chicago on February 12. Referred to letters from president of the Pennsylvania Society, who developed a ten point program which he stated Senator Hill, Alabama, would use in drafting a substitute bill for S.B. No. 5.

Told of interesting meeting recently attended as arranged by Tax Payers Federation of Illinois. Will

have more to say on that subject later. At the request of Hopkins, the Council unanimously went on record again as opposing compulsory health insurance, and copies to be sent to senators, congressmen, etc.

STEVENSON reported as president-elect, telling of many meetings he had been attending and the several talks he had been making before various types of lay groups. Has a busy itinerary for month of April in all parts of the State. Discussed importance of radio in the present educational program and told of recent conversations with an outstanding radio station manager.

HEDGE reported as chairman of the Council, stating that he had several recommendations to make at this time. Discussed expansion of Leary's office and new duties which have been assigned to him. Will necessitate additional expense, for assistants and materials which will be needed. Council went into executive session, for discussion of these proposals, all of which were acted upon.

Hedge as chairman of the Journal Committee stated that this Committee has been endeavoring for months to follow the orders of the Council to procure a satisfactory Associate Editor for the Illinois Medical Journal. The Committee was unanimous in recommending that efforts be made to get Theodore R. Van Dellen to accept this appointment. He had interviewed Van Dellen who was interested and at the recommendation of Hedge and his Committee, the Council authorized the employment of Theodore R. Van Dellen as Associate Editor to take effect April 1, 1949.

REPORTS OF INDIVIDUAL COUNCILORS:

Blair reported that members in industrial areas in his district have been cooperating splendidly in payment of the special assessment, but wanted more information as to what is to be done in this educational program. He has endeavored to give answer on each occasion.

Lane discussed the special assessment, stating that the returns throughout his Southern Illinois District had been most satisfactory and through the efforts of local society secretaries, the plan had been well presented.

Neece told of a recent visit to Texas and attending meetings where this question was discussed. He spoke before one large society giving information on the assessment subject and the results were most satisfactory.

Vaughn told of the success of the recent Chicago Medical Society annual Clinical Conference. There was an overall registration of 4,507, of whom 2825 were physicians. There were 852 of these from outside of Chicago and Cook County.

Otrich discussed the meeting at the La Salle Hotel on February 27. Members from his local society who were present were enthusiastic over the educational program plans and the newly created speaker's bureau. He believes this conference was a most timely one, and will pay good dividends. Other members participated in the discussion of several activities during this part of the meeting.

HUTTON reported progress on the part of the Committee on Medical History stating that much valuable historical data is being procured each month and the cooperation on the part of the Auxiliary and others has been fine. Referred to regular meetings of Committee on Medical Service and Public Relations held that morning, a breakfast session. Warren H. Cole, as chairman of the C.M.S. committee, meets with Hutton's committee and efforts are being made constantly to coordinate the activities of the two committees. Leary told of recent work in his office, his expanded duties have required a great deal of time and effort. Told of many requests for the speaker's cards from all parts of the country. Referred to Rural Medical Care Committee conferences at Mount Vernon and Peoria, both of which he attended. Much interest was shown and there was much favorable publicity from these conferences. He requested that all speakers should report to his office on all talks made before lay groups, and would like (1) Records of all talks (2) Records of all speakers in each county and (3) Biographic data on all speakers. This information will permit him to keep adequate records and furnish material for subsequent reports.

NEAL told of recent legislative activities at the State Capitol; referred to bills introduced in State legislature as well as in the Federal Congress. Informal discussion of some of these proposals and Neal stated a report would be mailed soon to the Society membership as a whole.

BLAIR reported as chairman of the Educational Committee, telling of the work being done in that office. Referred to the television programs now being presented each week over WGN-TV which are becoming more popular each week. Dr. Van Dellen has been moderator for these programs and he has been of inestimable service to the Committee. So far as he knows, only one other State society is presenting this type of program regularly. At the request of Blair, the Council authorized the sending of an official thank you letter to Dr. Van Dellen for his fine cooperation in presenting these programs.

BERGHOFF reported as chairman of the Committee on Postgraduate Education and the Scientific Service Committee, telling of the Postgraduate Conferences scheduled for the month of March in La Salle and in April, Du Quoin, Quincy and Danville. Many scientific meetings are being arranged for county societies, and in some instances, the Committee sends out notices for the society relative to these meetings.

Cross, as Director, State Department of Public Health, told of recent activities within his department. Told of proposed change in the Searcy-Clabaugh Act to make it compulsory for county boards to place on the ballot the request to vote on county health departments, after receiving petitions for same signed by the required number of voters. Other matters pertaining to health of people in Illinois were discussed.

Hopkins told of recent meeting of his Committee on Prepaid Medical and Surgical Plans. Progress has

been slow but some excellent insurance companies are now writing policies throughout Illinois. Another meeting of his committee will be held before the Annual Meeting in May.

Coleman reported as chairman of the Medical Advisory Committee to the Illinois Public Aid Commission. This committee met the preceding evening with officials of the I.P.A.C. at which time the usual agenda was covered. There was a general belief that some fees were too low for services rendered to clients of the I.P.A.C., but at this time with unemployment on the increase, and a limited appropriation, this did not seem to be the time to make the recommendations. Administrative costs for operating these programs has been kept down in Illinois much lower than in most other States, from information given to the committee.

English told of the conferences on Rural Medical Care held in Mount Vernon and Peoria. Unusual interest was very much in evidence at both places. He told of the programs given, the interest shown, and is thoroughly impressed with the proposal that similar conferences be arranged in the future. English told of a desire to hold a dinner conference in Chicago in April for some 50 to 60 interns and residents in Chicago hospitals who will soon be seeking locations. There are a number of fine openings available especially in rural areas which should be brought to their attention. He would like permission to hold this conference, have a fine dinner, then a program which would be pertaining to subjects of interest, yet are not scheduled so far as he can ascertain, at any of the medical schools.

MOTION: Harker-Norbury, that English be instructed to hold such a conference in April. Motion carried.

Bornemeier, in the absence of Hoeltgen, told of plans for work of the Committee on Arrangements for the Annual Meeting. Everything has been arranged, and the Committees are all desirous of doing their part in making the Annual Meeting a most successful one.

Cole heartily endorsed the recommendation of English for the conference and dinner for the interns and residents. He stated that a recent poll taken at the University of Illinois College of Medicine of the Juniors,

only 18%, desired to go into a specialty and the remainder prefer to become general practitioners. This is, indeed, quite a contrast with similar polls in previous years. Cole also discussed the possibility of his Committee on Cancer Control developing a suitable manual on Cancer to go to the entire membership. This would be rather expensive but the Committee is willing to make an investigation as to probable costs and the results that might be expected from such a venture.

The Council authorized Cole and his Committee to make the necessary investigations and to report back to the Council at a later date, and at the same time, approving the proposal in principle.

It was moved that the desired budget asked for by the Woman's Auxiliary to help pay expenses of their annual convention be allowed. The following were elected to Emeritus Membership: C. C. Meeks, Pontiac; J. D. Scouller, Pontiac; Wm. T. Johnson, Eldorado; A. E. Everett, Granite City; Michael F. Dorsey, R. Robinson Duff, Victor S. Frankenstein, Elzear La-Mothe, John H. Nowlin and Leopold H. Pijan, all of Chicago; Wm. P. Fread, Ottawa; Carl C. Lawry, Earlville; Harry S. Lester and Roy Sexton, Streator; Ralph H. Woods, La Salle; Kellogg Speed, Highland Park; E. R. Cochran, Rockton; John W. Dreyer, Aurora; George H. Miller, Bellaire, Michigan.

The following were elected to Past Service Membership: W. R. Meadows, Elgin; Frank L. Smith, West Chicago; George H. Musselman, Galesburg; R. E. Lee Gunning, Tucson, Arizona; A. B. Storm and J. H. Donavon, Windsor; H. E. Canfield and Thomas A. Johnson, Rockford; James S. Johnson, Cairo; O. A. Rawlins, William H. Rose, S. T. Richmond, I. Val Freedman from Chicago and Erwin J. Rueck, Gifford.

Bills as audited by Finance Committee were approved by proper action. F. Lee Stone, as chairman of the Committee of Fifty Three, was appointed as a member of the special coordinating committee previously named by the Council, as requested by Hopkins.

Council adjourned at 3:00 p.m.

Harold M. Camp, M.D.
Secretary-Treasurer

PATHOLOGY CONFERENCES

EDWIN F. HIRSCH, DEPARTMENT EDITOR



Cortical Adenomas of Arteriosclerotic Kidneys

Alston C. Twiss, M.D.
Chicago

Sturm¹ in 1875 differentiated the solitary adenoma of the otherwise normal kidney from the adenomas of the kidney with arteriosclerosis. The adenomas of the normal kidney, he stated, occur mainly in children and consist of newly formed alveoli. Adenomas of the arteriosclerotic kidney, according to Sturm, occur in adults beyond the age of 40 years. These solitary tumors develop along the lower third of the convex edge of the kidney and in the beginning are in the cortex. Microscopically, the tissues have dilated tubules and papillae. Weichselbaum and Greenisch according to Ewing² subsequently separated alveolar from the papillary forms of solitary growths. The relative frequency of different types of these renal tumors is difficult to ascer-

tain because of the difference of opinion in the classification.

Adenomas of the kidney are usually small, may be single or multiple, and appear in the cortex just beneath the capsule. Large adenomas are rare. Pathologists generally agree that adenomas of the kidney originate from the renal tubules, an origin first proposed by Albarron and Imbert³. There is, however, a sharp difference of opinion concerning the pathogenesis of adenomas and while numerous views have been expressed two main opinions prevail. The first is that adenomas develop as a compensatory mechanism from the epithelium of hyperplastic convoluted tubules and cysts in damaged kidneys; the second holds that they are associated with abnormalities in the embryologic development of kidneys.

From the Henry Baird Favill Laboratory of St. Luke's Hospital.

Arteriosclerotic kidneys with large coarse scars on the surface frequently have multiple adenomas. Ewing considered the common papillary cystadenomas seen frequently in arteriosclerotic kidneys as secondary to vascular occlusion. Many others have also stressed the frequent association of adenomas and arteriosclerosis. Bell⁴ stated that adenomas are seen rather frequently in the kidneys of hypertensive patients but are rare in the contracted kidneys of chronic glomerular nephritis. This he believed, is due probably to the fact that a primary obliteration of arteries occurs rarely in the latter disease, the atrophy being due to obliteration of the glomeruli from intracapillary obstruction. There is a general agreement that papillary cystadenomas and related new growths are found chiefly in arteriosclerotic kidneys. Oliver and Luey⁵ observed that a tubule belonging to a hyalinized glomerulus does not necessarily atrophy but may hypertrophy, dilate and even become hyperplastic. They stated that aglomerular nephrons have a blood supply adequate for maintenance and growth despite obliteration of the capillary bed in the glomerular tuft. The compensatory blood supply is provided by the vessel of Ludwig, which shunts the blood from the afferent arteriole directly into the intertubular capillary system. Not only may the amount of blood reaching the tubule be sufficient, but this blood may stimulate peculiar progressive reactions because of the directness of its course to the tubules. It has not passed through the glomerular tuft but reaches the tubules still laden with products which under normal conditions would have been removed by glomerular filtration. The demands for functional response on the aglomerular tubule and the corresponding growth process of hypertrophy and hyperplasia must be abnormally great in such kidneys. Thus, hyperplasia and hypertrophy may make a structurally intact tubule the physical equivalent of twelve normal units. Willis⁶ stated that the continuity of adenomatous epithelium with renal tubules can often be traced and the genesis of the growth appears clearly to be a progressive transformation of tubules into tumor, a process which accounts largely for the intermingling of tumor and renal tissues. According to Trinkle⁷, the papillary cysts develop from either local or generalized proliferation of the lining epithelium of the small simple cysts. Papillary cyst-

tadenomas develop both from the papillary cysts and directly from simple cysts. Connective tissue from the surrounding stroma grows into the epithelial projections to give them support. These are then capable of branching and re-branching to form a complicated intracystic network, typical of the papillary cystadenomas. Solid papillary adenomas develop directly from cystadenomas. The growth of papillary adenomas may result in a structure similar to that of certain hypernephromas.

The second view concerning the pathogenesis of renal adenomas is that those not arising from cysts, originate in some structure representing an aberration from the normal development of the kidney. In 1897 Albarron³ described displacement and imperfect development of the renal tubules which he believed resulted from errors of fusion in the capsule and cortex of the kidney. He suggested that renal neoplasms could originate from them. In 1915 Gerlach and Gerlach according to Kozoll and Kirshbaum⁸ detailed the growth cycle of hypernephroma and contended that cortical adenomas develop from aberrant rests of cortex tissues of the suprarenal gland. The adenoma then undergoes further hyperplasia and differentiation into a hypernephroma, at first benign and then cancerous. This continuous development explained the varied histological structure from papillary to adenoma and from carcinoma to sarcoma.

Microscopically, according to Willis⁶, cortical adenomas have a predominating intracystic papillary structure, justifying Newcomb's designation "papilliferous cystadenoma". Others have tubular or solid regions and many various structures may be seen in one nodule. In many adenomas, the epithelium consists mainly of small compact cuboidal cells but in other tumors the cells are largely vacuolated or foamy and closely resemble those of the clear-cell renal carcinoma. Solid and clear-cells may occur in one tumor. Common structural features attributable to secondary changes include the accumulation of phagocytic "foam" cells in the stroma of the tumor, calcification, intracystic hemorrhage and deposition of blood pigment in the epithelial cells and in the stroma. Many small adenomas are not encapsulated and the marginal tissues mingle with the neighboring renal tubules. Other nodules have thick fibrous capsules but

these are rarely, if ever, complete and at one or more places extensions of the growth through the capsule merge with the surrounding kidney tissues.

The separation between benign and cancerous adenomas on the one hand and carcinoma on the other is not sharp. A large portion of the parenchymal renal carcinomas fall into two morphologic groups, a papillary and an alveolar. Sturm¹, as early as 1875, contended that adenomas in children undergo a rapid transformation and that the adenomas of an adult undergo a slow transformation into clinical carcinoma. That adenomas undergo a slow transformation into clinical carcinoma is a view supported by many. The evidence of transformation from adenomas to carcinoma is more convincing in the papillary than in the alveolar forms. Several such apparent transitions were in the report by Cristol, McDonald and Emmett³. Evidence tending to support a relationship between carcinoma and adenoma is found in a case of Nicholson⁹. He described a tumor of a kidney, surgically removed, which had the structure of carcinoma and a recurrence developed six months later at the site of removal. Tissues of this recurrence had the characteristic microscopic form of a papillary adenoma. Bell¹⁰ and Creevy¹¹ have arranged all tumors of the renal parenchyma into two groups, adenomas and carcinomas. To prove that the adenoma was the precursor of the carcinoma, Bell presented 149 tumors from the records of approximately 20,000 consecutive autopsies. Among 65 of these tumors with a diameter of less than 5 cms., only 5 had produced metastases. Of 84 with a diameter greater than 5 cms., 66 had produced metastases. Bell stated that the histological structure afforded no reliable means of differentiating an adenoma from a carcinoma. Bell's adenomas are identical with the new growths which Kozoll and Kirschbaum⁸ designate as benign hypernephroma or hypernephroid adenoma and they concluded that a hypernephroma, regardless of size, can only be considered benign when metastases and local spread have been excluded. They described multiple histological types and structures even in the benign hypernephroma. Willis⁶ stated that adenomas have a structure indistinguishable from that of carcinomas and whether such tumors should be regarded as a typical adenomas or as small car-

cinomas discovered before they have metastasized is largely a matter of opinion. Many an "adenoma" found incidentally during a necropsy does not differ from some of the small symptomless carcinomas which have produced metastases. He stated that no structural criteria permit a differentiation of the cancerous from the benign phase. The available evidence seems sufficient to justify the conclusion that some carcinomas develop from papillary adenomas of the kidney.

Arteriosclerotic kidneys with many large and small cortical adenomas were observed recently during a necropsy at St. Luke's Hospital. A 42 year old white male entered the hospital on December 11, 1947 for a cardiovascular evaluation and was a known hypertensive for 10 years. His temperature was 99.2°F., pulse 100, respirations 20 per minute and the blood pressure was 230/145 mms. of mercury. The eye grounds had a grade 3 retinopathy, his heart was slightly enlarged to the left and had a soft systolic apical murmur. The remainder of the physical examination was not significant. The erythrocyte count and the leucocyte counts were not unusual. The straw-colored, acid urine had a specific gravity of 1.012 and contained 200 mgms. of albumin, many hyaline and finely granular casts per low power field and 3-4 erythrocytes per high power field. The blood urea nitrogen was 29.8, the non-protein nitrogen 55.5, the creatinine 2.4, the sugar 114 and chlorides 560 mgms. percent. The total blood proteins, the erythrocyte sedimentation rate and the clotting activity of the blood were within normal limits. The electrocardiogram indicated some myocardial pathology. On June 9, 1948 he was readmitted to the hospital with a huge, recent spontaneous hemorrhage of the right basal ganglia and thalamus with laceration and extensive intraventricular hemorrhage of the brain. Death occurred shortly after admission.

The right kidney was 11.5 by 5 by 2.4 cms. (Figures 1 and 2). Under the capsule were many large nodules of yellow tissue, some of them hemorrhagic, and when the capsule was stripped away there were multiple nodules of yellow tissue in both the anterior and posterior surfaces, very much like hypernephroma tissues. The largest, on the anterior surface just below the center, was 2.8 cms. in diameter. Two others along the convex edge were 1.5 cms. in



Figure 1. Photograph of the capsular surface of the right kidney illustrating the multiple large and small cortical adenomas.



Figure 2. Photograph of the surfaces made by hemisecting the right kidney and illustrating the distribution of the nodules in the cortex.



Figure 3. Photograph of the capsular surface of the left kidney illustrating the large adenoma at the upper pole and others elsewhere.



Figure 4. Photograph of the hemisected left kidney to illustrate the adenomas.

diameter, and on the posterior surface, mainly the lower half, were about 8 or 10 more that ranged between 3 to 10 mms. in maximum diameter. The capsular surfaces were dark red and coarsely granular. On the anterior surface and also the posterior were several cortical retention cysts that ranged to 1.5 cms. in diameter. The lining of the pelvis and of the right ureter opened down to the brim of the small pelvis was smooth and grey. The renal tissues were dark red, the cortex contrasted poorly with the pyramid tissues and was 8 mms. wide. The cortical markings were somewhat diminished. The pyramid tissues were about 15 mms. wide. Without its peripelvic fat and capsule the right kidney weighed 140 grams. The left kidney (Figures 3 and 4) was 13.5 by 5 by 4.2 cms. Along the convex edge toward the lower pole was a retention cyst 3.5 cms. in diameter. At the upper pole was a nodule with a maximum diameter of 4.5 cms. The tissues were yellow with mottlings of tan-brown. The capsule stripped with moderate resistance from a granular red-brown surface. On the sub-capsular surface were about twelve other yellow nodules ranging to 1.5 cms. in diameter. The lining of the left renal pelvis and ureter was smooth and grey. The left kidney without its peripelvic fat and capsule weighed 135 grams. The suprarenal glands were not unusual. Many surfaces made by cutting had a thin yellow cortex and a tan-brown medulla.

Histological preparations were made of the cortical adenomas of both kidneys. Several adenomas consisted of small dilated tubules and cysts lined by epithelium which at different places had papillary folds of vascular stroma covered by cuboidal or columnar epithelial cells. The nuclei stained deeper than those in the cells in the adjacent renal tubules. The cytoplasm of these cells was granular and stained lighter than of the cells of renal tubules. Other adenomas were mainly of the solid variety and appeared to be encapsulated. The papillary processes branched and rebranched to form the largest portions of the adenomas (Figures 5 and 6). There were a few cysts and dilated tubules. In some regions the cells had a tendency toward

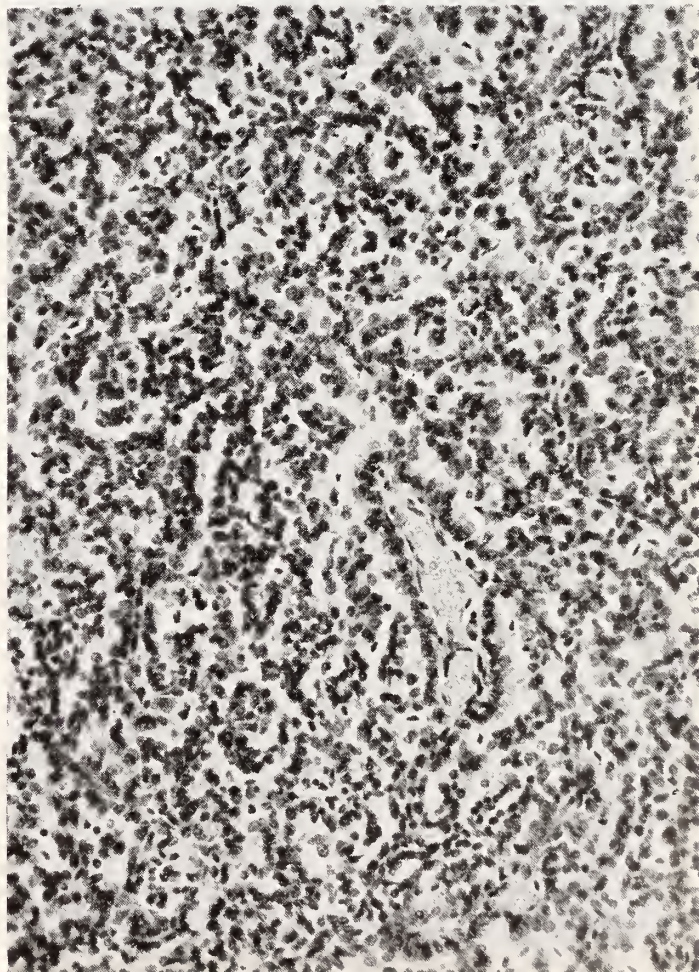
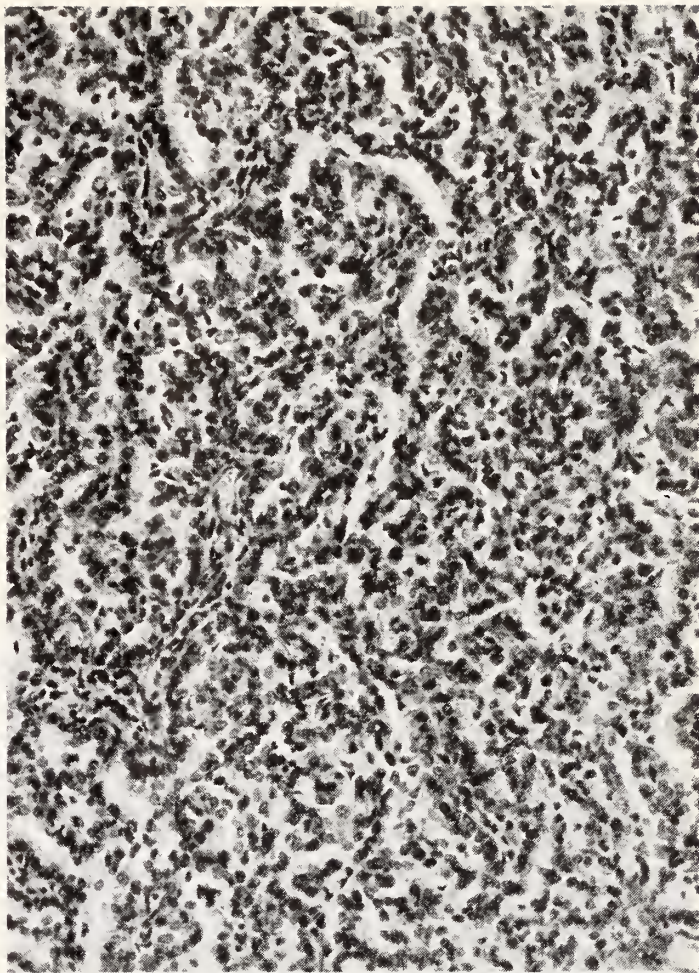


Figure 5 (above) and Figure 6. Photomicrographs illustrating the histologic structure of the adenomas. (X 198)

tubule formation. The epithelial cells were cuboidal to columnar with a darkly stained nucleus in the basal portion of the cell and a granular cytoplasm that stained deeper than the normal tubules. Between these two main types of cortical adenomas were adenomas of intermediate structure. They were in various stages of transformation from the cystic adenomatous type to the more solid papillary form. The renal parenchyma surrounding these adenomas had glomeruli which varied in size and with a moderate to slight fibrous tissue thickening. Bowman's capsules were thin but the tufts were cellular and fibrous. Connective tissue scars with infiltrations of lymphocytes replaced considerable parenchyma. The walls of the blood vessels were thickened by fibrous tissues, especially the intima.

COMMENT

Cortical adenomas occur commonly in the kidneys with arteriosclerotic contraction. They appear as small single nodules often with a tinge of yellow or in multiple nodules that may reach considerable size. Two main views prevail concerning the origin of these growths: 1) a compensatory hyperplasia of damaged kidney tissues, and 2) abnormalities in embryological development. The tissues of adenomas histologically

resemble, in certain respects, those of hypernephromas and they may simulate, even closely, a carcinoma of renal parenchyma. Arteriosclerotic kidneys with numerous large and small cortical adenomas are described in this report.

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NEWS OF THE STATE



CHAMPAIGN

Society News.—At a recent meeting of the Champaign County Medical Society at the Country Club, Drs. J. P. Nesselrod and Jay Garland, both of Chicago, presented a movie film in color and kodachrome slides, illustrating a talk on "Anorectal Conditions Encountered in General Practice."

COOK

Personal.—Dr. Charles D. Krause, instructor in obstetrics and gynecology, University of Illinois College of Medicine, will address the Sixth Council District of the Wisconsin State Medical Society in Oshkosh, May 19, on Eclampsia. The district comprises the counties of Brown, Door, Fond du Lac, Kewaunee, Outagamie and Winnebago counties.—Two hundred persons gathered to honor Dr. Louis H. Coggs on his thirty-second birthday recently and to mark his many services as a "country doctor" in a big city; Dr. Coggs has been engaged in general practice in the Altgeld community, a Chicago south side housing project, which has a population of more than 8,500.—Dr. Louis B. Newman was guest speaker at the postgraduate course in physical medicine and rehabilitation, University of Texas Medical Branch, Galveston, February 28-March 4. Dr. Newman, who is chief of physical medicine rehabilitation at the Veterans Administration Hospital, Hines, gave an illustrated lecture on "Physical Medicine and Rehabilitation in Thoracic Surgery."—Dr. Joan Fleming has been appointed assistant professor of psychiatry at the University of Illinois College of Medicine.

Society News.—"Advances in Gastric Surgery" was the title of a talk by Dr. Raymond W. McNealy, associate professor of surgery, Northwestern University Medical School and chief surgeon,

Wesley Memorial Hospital, before the London Academy of Medicine in London, Canada, recently.

—Dr. John Bellows, Chicago, assistant professor of ophthalmology, Northwestern University Medical School, addressed the Cleveland Ophthalmological Society in Cleveland, April 12, on "Recent Advances in Chemotherapy of Ocular Infection."—Dr. Max Thorek addressed the Oklahoma Academy of General Practitioners at Shawnee, Oklahoma, March 18, on "Facts on Hirschsprung's Disease of Interest to the General Practitioner" and "The Attitude of the General Practitioner in Gallbladder Disease", both of which were motion picture demonstrations.—Dr. Philip Thorek, Chicago, discussed "The Surgical Treatment for Advanced Carcinoma of the Colon" before the St. Margaret's Hospital staff in Hammond, Ind., March 1.—Dr. Herman N. Kamin, associate professor of medicine, Chicago Medical School, recently addressed a public lecture at the nurses residence of Mount Sinai Hospital on "Geriatrics: New Goals for Old Age."—The Chicago Council on Community Nursing was addressed by Miss Lucile Petry, chief, nurse division, U. S. Public Health Service, on "Present Trends in Nursing, March 28. On April 25, Dr. Esther Lucille Brown discussed "Nursing for the Future" before the Council.

Specialty Meetings.—A symposium on urinary lithiasis comprised the morning program at a regular meeting of the Chicago Urological Society, March 24. The following speakers participated: Dr. C. D. Creevy, Minneapolis; Dr. James C. Sargent, Milwaukee; Dr. T. P. Grauer, Dr. Charles Huggins and Dr. Harry C. Rolnick, moderator. A pyelogram clinic was conducted by Dr. Herman L. Kretschmer. In the evening the speakers were Dr. Creevy, Dr.

Irving J. Shapiro, Dr. John H. Olwin, Dr. Frank B. Papierniak and Dr. Nathaniel G. Alcock, Iowa City.

Course in Endocrinology.—On April 4, a weekly one hour postgraduate course on various aspects of endocrinology opened at the Walther Memorial Hospital, 1116 North Kedzie, Chicago. Participants in the course, which will be held every Monday morning from 8 to 9 a.m., through June, are Dr. James H. Hutton, consulting endocrinologist to the Illinois Central Railroad, C. & E. I., Railroad, Elgin State Hospital and Carnegie-Illinois Steel Corporation; Dr. I. Pat Bronstein, associate professor of pediatrics, University of Illinois College of Medicine, and Dr. Charles D. Krause, instructor in obstetrics and gynecology, University of Illinois College of Medicine.

Special Lectures.—The eighth Edwin R. Kretschmer Memorial Lecture of the Institute of Medicine of Chicago, was delivered April 29 by Dr. Maxwell M. Wintrobe, professor of medicine, University of Utah School of Medicine on "Current Views Concerning the Nature and Management of Leukemia and Allied Disorders." The twenty-fifth Ludvig Hektoen Lecture of the Frank Billings Foundation will be delivered at the Palmer House, Friday evening, May 27, by Dr. William B. Wartman, professor and chairman of the department of pathology, Northwestern University Medical School, on "Bleeding into the Arterial Wall: Its Relation to Vascular Disease."

Branch Meetings.—"The Origin of Symptoms in Biliary Tract Disease" (Post-cholecystectomy Syndrome) was discussed by Dr. Nathan A. Womack, professor and head of the department of surgery, University of Iowa College of Medicine, at a recent meeting of the North Shore Branch of the Chicago Medical Society. Dr. Meyer Brown, assistant professor of nervous and mental diseases, Northwestern University Medical School, discussed "Psychosomatic Problems in Medical Practice." The North Suburban Branch of the Chicago Medical Society was recently addressed by Dr. Alfred C. Ledoux, head of the department of radiology, St. Francis Hospital, Evanston, on "Basic Concepts in Roentgenologic Diagnosis" and by Dr. Roger Allen Harvey, professor and head of the department of radiology, University of Illinois College of Medicine, on "Problems in Radiologic Therapy." The discussant was Dr. Danely Slaughter.

Northwestern's Medical Faculty and Alumni Hold Reunion.—The faculty and alumni of the Northwestern University Medical School held their annual medical faculty-alumni reunion dinner, May 14. Dr. J. Roscoe Miller, retiring dean of the school, who will become president of the university in July, was guest of honor. Dr. Frederick W. Merrifield, an oral surgeon who is a member of the surgery faculties of both the medical and dental schools, was the principal speaker.

Representatives of the five-year medical classes of 1904, '09, '14, '19, '24, '29, '34, '39 and '44 had special tables at the dinner, and members of the 50-year class, that of 1899, the 55-year class, 1894, and this year's graduating class were guests of the Medical Alumni Association.

Milan V. Novak Named to New Post.—Dr. Milan V. Novak has been appointed assistant dean of the Graduate College for the University of Illinois Chicago Professional Colleges. Dr. Novak has been a member of the faculty of the University of Illinois College of Medicine since 1940. He will continue to serve as professor and head of the department of bacteriology.

Dr. Louis N. Ridenour of Urbana is the dean of the Graduate College. Dr. Novak will be in charge of administrative duties for the Graduate College on the campus of the Chicago Professional Colleges.

The new position has been created by the University because of the large increase in enrollment in graduate students working toward master of science and doctor of philosophy degrees, together with the need for expediting routine connected with this work.

There are now 121 students in the Graduate College who are working for advanced degrees in the three health professions, medicine, dentistry, and pharmacy. The number of students enrolled in graduate work on the Chicago campus has tripled since the close of the war.

New Acting Head of Anesthesia.—Dr. Max S. Sadove has been appointed acting head of the division of anesthesia at the University of Illinois College of Medicine. Dr. Sadove also has been promoted from the rank of assistant professor of anesthesia to associate professor. He has been a member of the faculty of the University of Illinois for the past two years.

Dr. Sadove received the bachelor of science degree in pharmacy and the doctor of medicine degree from the University of Maryland.

He spent five years in the Army Medical Corps, including four years in the European theatre. Following his release from active duty, he served a residency in anesthesia at the Veterans Hospital at Hines.

In addition to his present duties at the University, Dr. Sadove also serves as a consultant in anesthesia at Hines and at the Municipal Tuberculosis Sanitarium.

Northwestern Specialist Evaluates Antibiotics in Diseases of Eye.—A Northwestern University ophthalmologist's research has not only determined which of the newer antibiotics are best for the treatment of specific eye diseases, but has developed a swifter method of diagnosis and treatment.

He is Dr. John Bellows, assistant professor of ophthalmology in the University's Medical School, who reported the findings April 12 at a meeting of the Cleveland, O., Ophthalmological Club in the

Hotel Statler. Co-operating with him in the research were C. J. Farmer, professor of chemistry and chairman of the department in the Medical School, and Dr. Viola Richardson, laboratory and clinical investigator.

The scientists have perfected a diagnostic system in which smear cultures from the eye are examined to determine which germ is causing the disease. After the organism has been isolated, it is subjected to tests with a series of antibiotics, to ascertain which is the best remedy, in what concentration, and whether by local application or injection. This process completed, in a time much shorter than in previous methods, the course of treatment is then decided for the patient.

Dr. Bellows and his associates reported that streptomycin is the most effective, among all the antibiotics, for the cure of pyocyanus infections of the cornea which heretofore caused loss of the eye in many cases. Streptomycin also was found to be highly effective in treatment of tuberculosis of the eye. Intra-muscular injection is the best method of administration in the latter case.

Bacitracin, effective against the same bacterial infections which are cured by penicillin, was found by Dr. Bellows to have the advantage of not causing allergic reactions in the patient. The specialist believes bacitracin to be excellent for the treatment of many kinds of conjunctivitis ("pink eye") and corneal ulcer due to the invasion of streptococcus, pneumococcus, and staphylococcus.

Almost all eye diseases succumb to aureomycin, the scientists learned, but they have had especially noteworthy results with two stubborn types of infection, herpes simplex and epidemic kerato conjunctivitis. The latter is more commonly known as "shipyard" conjunctivitis.

Trachoma, another eye disease which, if neglected, usually leads to almost certain blindness, yields to treatment with chloromycetin, Dr. Bellows said. By speeding recovery, it prevents damaging scars on the cornea.

The Northwestern University research work by Dr. Bellows and his staff was supported in part by grants from the Office of Naval Research, the Veterans Administration, and the National Research Council.

Grants for Research.—Six grants in the total amount of \$22,825 have been awarded to the University of Illinois College of Medicine for research studies, Dr. A. C. Ivy has announced.

The Pope Foundation, Inc., Chicago, has made a \$10,000 grant for the support of a research program destined to establish dynamic techniques for the analysis of neuro-muscular skeletal pathology.

Bristol Laboratories, Inc., Syracuse, N. Y., has renewed a \$7,000 grant for research on the pharmacology of synthetic penicillin derivatives and analgesic drugs.

A study of the role of amino acid metabolism in leukemia will be supported by a grant in the amount

of \$4,200 made by the National Institute of Health.

Other grants have been received from the American Medical Association, \$625, for the study of the effect of beta radiation from Radium D on the eye; the G. D. Searle Company, \$600, for a preliminary study of the antacid compounds; and Abbott Laboratories, \$400, for the study of the effect of penicillin and streptomycin in peritonitis as produced experimentally.

New Laboratory Opened.—The University of Illinois' new \$400,000 Aero Medical and Physical Environment Laboratory, planned to study the effect of physical environment in health and disease, was officially occupied, April 11.

Research programs were to be undertaken immediately.

Dr. A. C. Ivy, vice-president of the University of Illinois in charge of the Chicago Professional Colleges, is director of the new laboratory. The staff is headed by Dr. John P. Marbarger, research director; Dr. Victor Guillemin, Jr., biophysicist; and Dr. M. K. Fahnestock, engineering director. The research studies will be conducted by interested departments and individuals in the Colleges of Medicine, Dentistry, and Pharmacy, and other units of the University.

The building, located in the Medical Center District on Chicago's near West Side, contains a ground floor and a first floor. It is modern in design, rectangular in shape with a flat roof, and measures 146 feet by 55 feet. The building has been under construction since September, 1947.

The research studies are expected to contribute to basic physiological knowledge concerning the effect of physical environmental factors on healthy and diseased humans. The studies also are designed to improve therapeutic procedures in the treatment of certain types of disease and to supplement present knowledge in the field of aviation medicine.

Major installations in the laboratory which will be available immediately for research include a 20-man low pressure chamber and a 6-man low pressure chamber, both secured from the U.S. Air Force.

The larger chamber is being modified to incorporate the control of dry bulb temperature and relative humidity within limited ranges, and the control of limited positive pressure in addition to negative pressure. It also will be of value in the investigation of problems pertinent not only to aviation medicine, but to any problem in which rigid control on environmental factors within limited ranges is desired.

The 6-man chamber can be used to simulate the very low atmospheric pressure that exists at high altitudes. It will be used in experiments in which it is desirable to control only the barometric pressure and no other environmental factors.

A constant temperature room now is being installed and will be available this fall. It is a room in which the dry bulb temperature can be precisely controlled between minus 40 degrees F and plus 150

degress F, and the relative humidity between 15 percent and 95 percent.

The building also contains a mechanical equipment room, a machine tool shop, a biophysics laboratory to be used primarily for instrumentation, a chemistry laboratory, two general laboratories, and space for a department library and administrative office.

Major installations planned for the future include a radiation test laboratory, a constant temperature, humidity, and pressure room, and a noise and vibration-free room.

Radioisotope Unit Unique in Its Triple Function.

—The newest radioisotope unit in the middlewest, and one which is uniquely constituted for the triple activities of instruction, research and therapy, has just been established in the Medical School of Northwestern University, it was announced recently by Dr. J. Roscoe Miller, dean.

Equipment for the unit's laboratories is being financed with a grant in excess of \$27,000 from the Atomic Energy Commission through the Office of Naval Research.

In addition to providing instruments and other facilities for research involving the use of radioisotopes, the Medical School unit will introduce several new courses into its undergraduate curriculum, and already has formulated a proposed program of post-graduate medical instruction in the utilization of radioactive elements.

The third phase of the unit's operations, that of patient therapy, will involve the University's four affiliated hospitals, Wesley Memorial, Passavant Memorial, Evanston, and Children's Memorial, and one of its cooperating institutions, St. Luke's Hospital.

For all three operations, the AEC will supply the radioactive materials from Oak Ridge, Tenn. They will be used for therapy in cancer and blood diseases, for diagnosis of thyroid diseases and, it is tentatively planned, for the localizing of brain tumors.

Already introduced into the Medical School's freshman curriculum is a course in the department of chemistry in instruction in the basic concepts of nuclear chemistry, its use in research, and the theory and practice of radiological instruments. Phases of this instruction include atomic and nuclear structure, radioactivity, toxicity of radioisotopes and concomitant health hazards, and instrumentation and tracer techniques.

The aim of instruction in health hazards is to make an increasing number of physicians aware of the results of radiation, not only in the event of military operations involving civilian populations, but also because of future greater use of isotopes in industry.

In the sophomore year, an hour lecture will be introduced on the distribution, deposition, and excretion of radioactive isotopes. The students will

also be instructed in the treatment of patients suffering from excessive radiation.

Planned for the junior year in the department of radiology is an expansion of its instruction in diagnostic and therapeutic radiology to include consideration of radioactive isotopes. It is intended to give the students additional practice in the use of survey instruments and safety precautions.

Not only will the affiliated and cooperating hospitals participate in the therapy program, but radioactive elements will also be made available to the Medical School's Montgomery Ward clinics.

Supervised by Dr. John A. D. Cooper, assistant professor of chemistry, the laboratory is situated in the Montgomery Ward building in the University's medical center on the Chicago campus. It consists of four rooms so located that they are isolated in a wing from other departments of the School.

One of the rooms is being converted into a "hot laboratory" with equipment for handling and processing of multimillicurie shipments of radioactive elements according to the recommendations of the AEC health physics division. Equipment in this room includes a shielded high velocity hood for use in manipulations in which the possibility of airborne radioactivity arises. The "hot laboratory" will receive and process isotopes for both research and therapy.

Another of the rooms in the suite is being equipped solely for counting radioactive samples. Among the facilities are scaling units and shielded sample holders to allow simultaneous research on several problems.

In addition, the laboratory plans include two small analytical laboratories, already furnished with equipment for biochemical research, which will be used for handling low activity samples which do not require the more elaborate protection of the "hot laboratory."

Acting in an advisory capacity in establishment of the laboratories are Argonne National Laboratory engineers and Prof. Burgess Jennings, chairman of the department of mechanical engineering in Northwestern University's Technological Institute.

Personnel of the radioisotope unit numbers seven men on the faculty of the Medical School, all of whom are members of the School's isotope committee. Unit chairman is Dr. Howard L. Alt, associate professor of medicine. Others are Dr. Earl Barth, associate professor of radiology and chief of the radiology service of Wesley Hospital; Dr. Cooper; Chester Farmer, professor of chemistry and chairman of the department in the Medical School; Dr. Smith Freeman, professor of experimental medicine and chairman of the department, who is a member of the isotope committee at the Veterans Administration Hospital at Hines, Ill.; Dr. George V. LeRoy, assistant professor of medicine; and Dr. Ray S. Snider, associate professor of anatomy.

Drs. Alt, Barth, Cooper, Farmer and Freeman are participating institution members of the Argonne Laboratory. Dr. Snider is consultant to the biological division at Argonne. Dr. LeRoy is acting director of the radioisotope unit at Hines.

Nursing Education.—Advanced work in nursing education for nurses training to enter institutional positions or public health will be offered in the summer session at the University of Chicago. Planned primarily to afford opportunities for advanced study to graduate nurses, the program is divided into two five-week terms, June 28 to July 29 and August 1 to September 3. Courses to be included in the summer quarter are an introduction to the study of nursing education, current trends in nursing, teaching professional problems, community nursing, introduction to the study of nursing education, principles of public health nursing, teaching of health, special fields in public health nursing, ward management and teaching, evaluation of nursing procedures, construction and use of achievement tests in nursing, apprentice teaching, teaching nursing in the clinical fields, maternity nursing, nursing care of children, social case work, teaching nursing arts, supervision in clinical nursing, supervision in public health nursing, supervision or administration in public health nursing, curriculum in nursing education, and problems in nursing education. Related courses also are offered in the fields of business, home economics, physiology, and education. Information and admission application blanks may be obtained from the Nursing Education Office, 5733 University avenue, The University of Chicago, Chicago 37, Illinois.

Care Given to Navajo Children.—Six Navajo crippled children from Arizona and New Mexico in need of specialized medical care and hospitalization will be treated this year at the Home for Destitute Crippled Children, which is affiliated with the University of Chicago Clinics, William Burry, Jr., president of the Home, announced recently.

A mercy project undertaken by the home to alleviate the suffering of the most difficult and complicated cases among the more than 500 crippled Navajo children, the service is an extension of the Home's current year's program for 24 Alaskan crippled children.

During the last year, 251 children from Chicago were admitted to the Home for 13,141 patient days of care. One hundred and fifty-five of the 251 Chicago children were part-pay or free patients.

Last April, the Home made provisions for two Alaskan children from the Division of Crippled Children of Alaska to be sent to Chicago each month for surgical and medical attention. Fourteen Alaskan children have been sent to date, and six have been returned to their homes.

"The Home for Destitute Crippled Children's project will help to meet the emergency situation of the Navajo crippled children," M. M. Stewart, general superintendent of the Navajo service of the

Office of Indian Affairs of the Department of Interior, stated at the announcement of the program.

"Some of the crippled Indian children living in Arizona have been cared for through the Indian Service hospital at Phoenix, but there is no provision in the state to care for Navajos under the Crippled Children's division of the social security program," he added.

Children under 21 years of age will be admitted to the Home, and will remain in the clinics for four to six months for medical treatment.

DE WITT

New Health Officer.—Dr. E. M. Thompson, Lexington, Ky., has been appointed health officer of the De Witt-Piatt County health unit, it was announced by Dr. Hal E. Gronland, president of the bi-county board of health. Dr. Thompson succeeds Dr. Corrine S. Eddy who resigned recently. He has been health officer and director of field training at the Lexington-Fayette county health department in Kentucky for the past two and a half years.

MC HENRY

Society Election.—The following officers were elected at the annual meeting of the McHenry Society recently: Dr. C. E. Wittenberg, Woodstock, president; Dr. J. H. Goodlad, Harvard, vice president and Dr. B. B. Neuchiller, Woodstock, secretary-treasurer.

SHELBY

Completes Sixty Years of Practice.—Dr. J. H. Donovan, Windsor, completed sixty years in the practice of medicine, March 5. Fifty-seven years have been spent in Windsor where he came from Lovington. Dr. Donovan holds membership in the Fifty Year Club of the Illinois State Medical Society.

UNION

Society Chooses Officers.—Dr. John Merideth, Cobden, was elected president at a recent meeting of the Union County Medical Society. Other officers elected were Dr. W. A. Schroeder, Anna, vice president and Dr. E. V. Hale, Anna, secretary-treasurer.

UNION

Welfare Department Holds Conference.—A graduate conference for physicians was held by the Illinois Department of Public Welfare at the Anna State Hospital in Anna, April 14, with the following speakers participating: Dr. Ben W. Lichtenstein, Chairman, program committee; Dr. Groves Smith, Godfrey, "The Sexual Psychopath"; Dr. V. G. Urse, Chicago, "Treatment of Nervous and Mental Disorders"; Dr. A. H. Rosenblum, Chicago, "An Internist Looks at Psychosomatic Medicine"; Dr. A. J. Arieff, Chicago, "A Psychiatrist Looks at Civil Offenses"; Dr. F. P. Bornstein, Herrin, "Organic Phase of Psychoses"; Dr. C. D. Nobels, superintendent, Anna State Hospital; and Dr. Roland M. Klemme, St. Louis, "The Treatment of Parkinsonism".

GENERAL

Conference on Nervous System.—Six scientists from five foreign countries accepted the invitation to attend a conference on development, growth and regeneration of the nervous system, held by the International Union of Biological Sciences at the University of Chicago, March 21-25.

Participating in the meeting, which was sponsored by UNESCO and the Rockefeller Foundation, were: J. Boeke, Utrecht; Dr. Holger Hyden, Stockholm; Dr. Rita Levi-Montalcini, Torino; Alberto Stefanelli, Rome; Sydney Sunderland, Melbourne; and J. Z. Young, London.

The present state of knowledge of the nerves and the evaluation of progress was analyzed by the conference members. A final summary meeting on March 25, was open to all interested scientists.

Subjects discussed during the conference included: "Differentiation of the Central Nervous System," "Nerve Fiber Orientation and Patterns," "Physiology of Neuron Growth," "Peripheral and Central Nerve Regeneration," "Problems of Specificity and Selectivity", and "Neural Growth and the Development of Behavior".

American members taking part in the conference were: Dr. D. H. Barron, Yale; Dr. David Bodian, Johns Hopkins; Dr. S. D. Delwiler, Columbia; Dr. L. B. Flexner, Carnegie; Dr. R. W. Gerard, University of Chicago; Dr. Viktor Hamburger, Washington University; Dr. Davenport Hooker, Pittsburgh; Dr. W. H. Lewis, Wistar; Dr. F. O. Schmitt, Massachusetts Institute of Technology; Dr. C. C. Speidel, Virginia; Dr. Roger Sperry, University of Chicago; Dr. Paul Weiss, University of Chicago; and Dr. W. F. Windle, Pennsylvania.

Society for Handicapped.—The Annual Convention of the National Society for Crippled Children and Adults will be held November 7-9 at the Commodore Hotel, New York, according to an announcement made from Chicago headquarters by Lawrence J. Linck, executive director. Prominent authorities working in the field of the handicapped will present latest developments at the three-day session marking 28 years of service for the Society. Delegates from 2,000 state and local affiliates of the National Society will discuss research, rehabilitation, training and treatment for the handicapped.

Medical Use for Television.—An important medical disclosure involving a new use for television was revealed April 5 by the University of Illinois College of Medicine.

University investigators disclosed that television can be used to make x-ray films clearer, sharper and be of definite assistance in making a diagnosis.

The discovery of new possibilities of television stemmed from studies made by Craig W. Goodwin and Dr. John S. Garvin, in conjunction with Television Station WBKB, Chicago.

The significance and clinical application of the disclosure was pointed out by Dr. Roger A. Harvey, head of the University's department of radiology. He explained:

"X-ray films have been reproduced on television screens in the past in connection with transmission of surgical producers and clinical conferences. However, their inclusion has been incidental and little has been done to investigate the possibilities."

University researchers found that "an extremely high degree of accuracy" can be obtained in reproducing x-rays on television. By varying the density and contrast controls on the receiver, details and findings on the original film can be brought out much more clearly. For example, questionable shadow can be brought out in great detail, and both over and under-exposed film can be corrected.

Dr. Harvey said that in an x-ray film dealing with both bone and soft tissue structure, the radiologists were able to bring out the detail of both structures. He added that the television camera can magnify a small area of the receiving set.

When this procedure was employed in one of the experiments—in a routine check—the investigators found some small stones in the gall-bladder on a film which previously had been overlooked in the ordinary method of viewing.

In the experiments made with the cooperation of Station WBKB, the films were transmitted over a closed circuit so that they could be seen only on a set viewed by the investigators.

Dr. Harvey indicated that television, thus far principally a device for spreading entertainment, might become an important educational tool. He said that x-rays projected onto a television screen can be more easily studied and understood by students and doctors than can the original films even if viewed in the conventional illuminating box.

Television also may make it possible to bring skilled, specialized medical advice to the most remote communities. A small television camera, for example, could transmit by wire an x-ray to a large medical center for immediate consultation. Thus, in the case of an emergency, the physician on the scene would have expert advice quickly available.

Society of Illinois Bacteriologists Honor Dr. Koser.—The Society of Illinois Bacteriologists conferred its Annual Pasteur Award for outstanding contributions to the science of bacteriology on Dr. Stewart A. Koser, Professor of Bacteriology, The University of Chicago at a meeting of the Society on May 6, 1949.

Dr. Koser is well known throughout the world for his contributions in bacteriology. He was born in Harrisburg, Pennsylvania, and received his Ph.D. in bacteriology from Yale University. He served in the United States Army during the first World War, following which he became bacteriologist in the United States Department of Agriculture at Washington, D. C. In 1923 he was appointed As-

sistant Professor of Bacteriology at the University of Illinois. He came to the University of Chicago in 1928. At present he is Professor of Bacteriology in the University of Chicago and also Professor of Bacteriology in the Walter G. Zoller Memorial Dental Clinic.

His chief research has included studies on the paratyphoid group of bacteria, food poisoning, and the growth requirements of bacteria. He has published about 75 scientific articles. He is on the editorial board of two scientific journals and has been elected Councilor of the Society of American Bacteriologists on two occasions. During 1943-44 he was President of the Society of Illinois Bacteriologists.

MARRIAGES

DR. FLOYD E. DUNCAN, Rushville, to Mrs. Ruth Lesage, Chicago, recently.

DEATHS

MAURICE P. APMADOC, Chicago, who graduated at Harvey Medical College in 1902, also a dentist, died recently aged 76, of arteriosclerosis and myocarditis.

KARL MIKAEL BECK, Waukegan, who graduated at Loyola University School of Medicine in 1918, died March 19, 1949, aged 56.

CHARLES F. CHILDS, retired, New Boston, who graduated at Kentucky School of Medicine, Louisville, in 1892, died April 1, aged 79, following a long illness.

THOMAS MARTIN EGAN, Chicago, who graduated at Bennett College of Eclectic Medicine and Surgery in 1915, died April 10, aged 56.

RHODA GALLOWAY-YOLTON, Bloomington, who graduated at Woman's Medical College, Chicago, in 1887, died in the Brokaw Hospital, Normal, December 23, aged 86, of myocarditis and arteriosclerosis.

EDWARD PHILLIP GRAMER, Chicago, who graduated at the University of Illinois College of Medicine in 1920, died November 25, aged 56, of myocardial infarction. He was associate clinical professor of surgery at Loyola University School of Medicine.

GEORGE D. J. GRIFFIN, Chicago, who graduated at Northwestern University Medical School in 1908, died March 27, on his 62nd birthday. He was clinical professor of surgery at Loyola University School of Medicine.

HARRY C. HILL, Streator, who graduated at Rush Medical College in 1894, died suddenly March 9, aged 80. He was an Emeritus Member of the Illinois State Medical Society.

OSCAR W. HUBBARD, Batavia, who graduated at Illinois Medical College in 1898, died recently, aged 84. He had practiced medicine for more than 50 years.

ALFRED EDWARD JONES, Chicago, who graduated from the University of Illinois College of Medicine in 1915, died November 10, aged 58, of chronic myocarditis.

MICHELANGELO PACELLA, Waukegan, who graduated at Chicago Medical School in 1922. Died in St. Theresa Hospital December 11, aged 78, of chronic nephritis and pneumonia.

OTTO S. PAVLIK, Oak Park, who graduated at Northwestern University Medical School in 1904, died March 29, aged 74.

"For The Common Good"

Health Education Over WGN-TV.—The public information service programs, launched by the Educational Committee of the Illinois State Medical Society in cooperation with WGN-TV, continues as a weekly feature over that station.

Each story is told graphically with the use of patients, models, equipment and demonstrations.

John L. Keeley, in his program, April 12, gave a touch of humor when he rattled a jar of gallstones to highlight "When Your Gallbladder Misbehaves."

David Slight used a funnel and water demonstration to emphasize uncontrolled emotions and energy, April 19, on the program "Your Emotions and Your Health."

Highlights of the May schedule will be given in the June issue of the Illinois Medical Journal. Scheduled shows are:

Charles D. Krause, May 3, So You're Expecting a Baby.

Gilbert H. Marquardt, May 10, Geriatrics and You.

Maurice Cottle, May 17, Breathe Through Your Nose.

Howard B. Carroll, May 24, Taking Care of Your Ulcers.

Dr. Theodore R. Van Dellen, Medical Editor of the Chicago Tribune, associate professor of medicine, Northwestern University Medical School, and newly appointed associate editor of the Illinois

Medical Journal, acts as physician-emcee on all programs.

Lectures Arranged Through the Scientific Service Committee of the Illinois State Medical Society; Robert S. Berhoff, Chicago, Chairman; Louis R. Limarzi, Chicago, Vice Chairman:

John L. Keeley, Chicago, Livingston County Medical Society in Pontiac, March 24, on Intestinal Obstruction, Illustrated.

Hugh M. Flack, Chicago, Fulton County Medical Society, Canton, March 31, on Cardiac Failure in Hypertension.

Ladislav J. Meduna, Chicago, Sangamon County Medical Society in Springfield, April 7, on Psychosomatic Medicine.

Percy E. Hopkins, Chicago, Winnebago County Medical Society in Rockford, April 12, on What is Being Done in the National Picture.

John W. Huffman, Chicago, Kane County Medical Society in Aurora, April 13, on Carcinoma of the Cervix.

Gilbert H. Marquardt, Chicago, Warren County Medical Society in Monmouth, April 13, on Anticoagulants.

Warren W. Furey, Chicago, Henry County Medical Society in Geneseo, April 14, on Acute Conditions of the Abdomen as Seen by the Radiologist.

Chester Coggeshall, Chicago, Northwest Branch, American Academy of General Practice, April 15, on Office Diagnosis of Diabetes.

Will F. Lyon, Chicago, Fulton County Medical Society in Watseka, May 31, on Hormone Preparations.

James H. Hutton, Iroquois County Medical Society in Watseka, May 31, on Hormone Preparations and Their Uses.

John R. Vonachen, Peoria, Bureau County Medical Society in Spring Valley, June 7, on Modern Trends in Pediatrics.

George H. Rezek, Chicago, Will-Grundy County Medical Society in Joliet, June 9, on Female Endocrines.

Archibald Hoyne, Chicago, Effingham County Medical Society, in Effingham, June 16, on The Known and Unknown in Poliomyelitis.

James J. Callahan, Chicago, Will-Grundy County Medical Society, June 23, in Joliet, on General Fractures.

Lectures Arranged Through the Educational Committee of the Illinois State Medical Society; Charles P. Blair, Monmouth, Chairman; Warren W. Furey, Chicago, Vice Chairman:

Charles J. Smith, Chicago, Dupage County Health Department, in Villa Park, March 29, on The Rh Factor.

Harold Rosenbaum, Chicago, Jackson Boulevard Christian Church, March 16, on Venereal Disease.

Leonard J. Murphy, Chicago Career Conference, Steinmetz High School, Chicago, March 22, Medicine as a Career.

Marc Hollender, Chicago, Twelfth District, Illinois Federation of Women's Clubs in Morris, April 1, Growing Old Gracefully.

Frank Deneen, Bloomington, Adult Education Program, Odell Community High School, Odell, April 5, on Heart Disease.

Charles J. Runner, Chicago, Olivet Baptist Church in Chicago, April 10, on General Health.

John A. Rogers, Chicago Woman's Auxiliary, Chicago Medical Society, April 12, on Cancer.

Murray Nierman, Calumet City, film on Human Reproduction before the Calumet City Young Woman's Club, April 19.

Walter R. Kirschbaum, Club Oasis, in Chicago, April 24, on Psychosomatic Medicine.

Groves B. Smith, Godfrey, April 5, Salem High School on Mental Hygiene Aspects of School; Salem Woman's Club, Mental Problems within the Community, and Lions Club, Mental Hygiene in Relation to Community Planning.

Joseph Bertucci, Chicago, Frederic Chopin School PTA in Chicago, May 5, Health of the School Child.

Ben Park, Radio Director, It's Your Life, Chicago Industrial Health Association, the Chicago Pediatric Society, May 24, on The Story of It's Your Life.

Warren H. Cole, Illinois State Nurses Association in Ottawa, June 2, on Socialized Medicine.

The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

Harold M. Camp, EDITOR. Theodore R. Van Dellen, ASSOCIATE EDITOR.

EDITORIAL BOARD — James H. Hutton, Chairman, Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher, Harry Culver, Walter Stevenson, Raymond W. McNealy, Arkell M. Vaughn.

Vol. 95, No. 6



June, 1949

MEET THE NEW PRESIDENT

At the end of the business session at the Second Meeting of the House of Delegates of the Illinois State Medical Society, Walter Stevenson of Quincy was inducted into the office of president for the next year. Percy E. Hopkins, the retiring president, presided at the induction ceremony, turning over the official gavel to Doctor Stevenson.

Doctor Stevenson assured the members of the House of Delegates, and others who were present, that he would endeavor to carry on as president for the coming year to the best of his ability. At the same time, he congratulated the House for its judgment in electing Doctor Hopkins as president-elect at the 1947 annual meeting, as he has functioned most efficiently during these trying times.

Dr. Walter Davis Stevenson was born in Baltimore, Maryland, where he attended St. Martin's Academy and Loyola University. In 1906 he received his M.D. degree from the University of Maryland School of Medicine. He was demonstrator in Chemistry and Anatomy at the University of Maryland from 1902 to 1906; was Assistant Professor of Chemistry and Toxicology and Anatomy at the University of Maryland until 1909. Early in his professional career he decided to specialize in Ophthalmology, and dur-

ing World War I was Captain in the Medical Corps, was Chief Ophthalmology for A. E. F. Base Hospital 54.

Since 1914 he has been Oculist-in-chief for St. Mary's Hospital, Quincy, and a member of the staff of the other hospitals in that city. For a number of years he was secretary of the Adams County Medical Society; he was elected Councilor for the Sixth District, Illinois State Medical Society, in 1942, and served as Chairman of the Council from 1946 to 1948. He is a member of many medical societies and organizations in addition to his county, state and A. M. A. affiliations. He has been a Fellow of the American College of Surgeons and of the International College of Surgeons. As would be expected, he is a member of the leading Ophthalmological Societies, and also of the societies embracing Otolaryngology, and has prepared and published many papers since 1916.

While serving in the State Society Council, Doctor Stevenson rarely missed a meeting, and then only when it was impossible for him to be present. He was always interested in the work of the Council and has participated freely in its many deliberations. During the past year, as president elect of the Illinois State Medical Society, he has appeared before medical societies throughout the state, and also has made many talks before lay groups, rarely refusing to accept

an invitation to appear anywhere in the entire state.

Doctor Stevenson has not only the interest of the Society at heart, but also has the background which is essential at this time for the presiding officer of a medical society with approximately 10,000 members. Those who know him well are confident that he will function in the office of president in a highly satisfactory manner, and keep in mind at all times, the interests of the members of the profession with which he affiliated many years ago.

THE WORLD MEDICAL ASSOCIATION

The World Medical Association came into being in Paris, September, 1947.

The objects of the World Medical Association as defined in its Constitution are:

(1) To promote closer ties among the national medical organizations and among the doctors of the world by personal contact and all other means available.

(2) To maintain the honor and protect the interests of the medical profession.

(3) To study and report on the professional problems which confront the medical profession in the different countries.

(4) To organize an exchange of information on matters of interest to the medical profession.

(5) To establish relations with, and to present the views of the Medical profession to, the World Health Organization, U. N. E. S. C. O. and other appropriate bodies.

(6) To assist all peoples of the world to attain the highest possible level of health.

(7) To promote world peace.

The unit of membership in the Association is the National Medical Association which is most representative of the member country. Each member association is entitled to send two delegates and as many observers as it desires.

After the first General Assembly, twenty-six nations fulfilled all the requirements of membership. One of these had to withdraw because the government of its country abolished the medical association.

At the Second General Assembly, fourteen more nations were elected to membership so that

at the present time there are thirty-nine nations represented through their national medical association. Others have applied and it is confidently anticipated that within the next two years there will be sixty nations represented.

Not all nations have a truly representative medical association, which is why some countries are not represented. It is fair to state in this connection that where there is no strong national medical association, health, medical care and medical education are on a distinctively lower level. One of the aims is to foster the development of national medical associations where there are none and to strengthen others, so that they in turn can become active agents in improving medical standards in their countries.

It may be wondered how a medical association can aid in fostering world peace. We believe it can do so very definitely. Doctors have a common meeting ground. They have like aims and ideals. Certainly, if they cannot get together no one can. In April, 1948, the Council of the World Medical Association met in New York. Its members saw American medicine and medical education in New York, Chicago and at the Mayo Clinic.

It is our firm belief that the members of this group were thoroughly impressed by American medicine and American hospitality. We believe they went home, all as good-will ambassadors to the United States. Much can be accomplished by further meetings and the extension of that good-will to their friends and associates not in the medical profession.

Many momentous decisions were made at the Second General Assembly, held at Geneva, Switzerland in September, 1948.

A report on German War Crimes was adopted. This document prepared by the United Nations gave in detail the crimes committed by German physicians in hospitals and concentration camps.

The German physicians not involved in these crimes were invited to disavow the actions of their criminal associates, to expel them from their medical societies and to take steps to prevent a recurrence. After much discussion the following vow was adopted by the General Assembly:

At the time of being admitted as Member of the Medical Profession

I solemnly pledge myself to consecrate my life to the service of humanity;



Walter Stevenson, M.D.

President, Illinois State Medical Society

1949-1950

I will give to my teachers the respect and gratitude which is their due;
 I will practice my profession with conscience and dignity;
 The health of my patient will be my first consideration;
 I will respect the secrets which are confided in me;
 I will maintain by all the means in my power, the honor and the noble traditions of the medical profession;
 My colleagues will be my brothers;
 I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patients;
 I will maintain the utmost respect for human life, from the time of conception; even under threat, I will not use my medical knowledge contrary to the laws of humanity.
 I make these promises solemnly, freely and upon my honor.

It was recommended that the above or a similar vow be adopted by the licensing authorities and the medical associations of the world as a prerequisite to licensure or membership.

Consideration was given to the preparation of an international code of ethics. A committee was appointed to draft such a code, and the Committee was given directions to divide the code into four chapters covering,

1. Obligations of physicians in general.
2. Duties of physicians to patients.
3. Responsibilities of the physician to the public, community and state.
4. Duties of physicians to each other.

It was also recommended that there be included provisions relative to the behavior of physicians visiting foreign countries.

A report entitled, "The Status of the Medical Profession in 23 Countries" was adopted. This report covers medical manpower, registration of physicians, professional organization, the environment of medical practice, the trend of medical practice and the status of the doctor in all these countries.

A preliminary report on "The Advertisement and Sale of Secret Remedies and Appliances" was approved and further study authorized. So far 22 countries have sent in replies on this subject. The report shows the presence or absence

of control and the character of that control when authorized.

Another preliminary report on "Unqualified Medical Practice" was approved and further study directed. 14 countries so far have submitted reports. It is a matter of regret that of the 14 countries replying the United States is one of two countries where there are schools or programs of training for unqualified practitioners. A complete report will be issued later.

A comprehensive study on "Medical Education" is in the process of compilation. It is hoped that this report will be ready in the Spring of 1949.

Post-graduate education and the training of specialists in the different countries is on the agenda for the next year.

A thorough discussion on Social Security and Health Insurance took the greater part of the day and a half of the proceedings of the General Assembly. The report finally adopted included a discussion of Social Security as it exists in various countries; the appointment of a permanent committee on social security to study and keep all medical associations informed of changes in the situation as they develop throughout the world, and the adoption of the following 12 principles whenever medical care is provided as a part of social security;

1. Freedom of choice of physician by the patient. Liberty of physician to choose patient in cases of urgency or humanitarianism.
2. No intervention of third party between physician and patient.
3. Where medical service is to be submitted to control, this control should be exercised by physicians.
4. Freedom of choice of hospital by patient.
5. Freedom of the physician to choose the location and type of his practice.
6. No restriction of medication or mode of treatment by physician except in case of abuse.
7. Appropriate representation of medical profession in every official body dealing with medical care.
8. It is not in the public interest that physicians should be full-time salaried servants of the government or social security bodies.

9. Remuneration of medical services ought not to depend directly on the financial condition of the insurance organization.
10. Any social security or insurance plan must be open to the participation of any licensed physician, and no physician should be compelled to participate if he does not wish to do so.
11. Compulsory health insurance plans should cover only those persons who are unable to make their own arrangements for medical care.
12. There shall be no exploitation of the physician, the physician's services or the public by any person or organization.

Other activities of the Association include the publication of a quarterly Bulletin. Committees have been appointed to draft a method of coordinating the medical press of the world and to study medical care and allied subjects.

Although only a year old, the Association has made tremendous progress and it is felt that it will rapidly become a powerful force for the improvement of health, the progress of medicine and the promotion of international good-will.

Close liaison has been effected with the World Health Organization so that we may work together and not duplicate each other's efforts. To remove confusion which is prevalent, let me differentiate the two organizations.

The World Health Organization is a branch of the United Nations and represents the governments of the world in medicine, more particularly in the field of public health. Its financial support comes from government funds.

The World Medical Association is an organization representing the medical associations and the doctors of the world, more particularly in the field of medical care and medical education. Its support is from private funds exclusively.

The World Medical Association derives its general income from dues paid by member associations. The amount received is insufficient to make the association a functioning body. Some associations are in such financial straits that they cannot pay their dues. Others who can are unable to send money out of their countries. Hence, if the Association is to be active, it must seek funds from other sources.

A United States Committee has been organized and incorporated. The objects of this com-

mittee are to assist the World Medical Association in furthering those of its objects which pertain to the promotion of world health, world medicine and world peace. The committee has guaranteed to underwrite the expenses of the World Medical Association in connection with its secretariat, traveling expenses of its Council in attending official meetings (who otherwise could not come) and publication of the Bulletin. One of the stipulations was that the Secretariat was to be on this side of the Atlantic Ocean. This was agreed to and the headquarters of the Association and of the Committee are located in the New York Academy of Medicine at 2 East 103rd Street, New York City.

Membership in the Committee is open to every organization and individual in the United States. Already hundreds of doctors and laymen and many business and medical organizations have become members.

We desire many thousand individual members. May I express the hope that each of you will become a sustaining member of the Committee. Each member will receive a certificate of membership, the Bulletin and all publications of the World Medical Association and the United States Committee. What, I trust will be the greatest inducement for you to join, however, is the knowledge that you will be contributing to the advancement of public health, improvement of the standards of medical care and medical education throughout the world and the promotion of international good-will.

The World Medical Association can become an effective organization if it has adequate financial support. Whether or not it succeeds will depend in large part on the doctors of the United States. The medical profession of the world is looking to us for help — we cannot let them down.

L. H. B.

PROGRESS IN THE FIELD OF VACCINATION AGAINST TUBERCULOSIS

Not long ago the Committee on Tuberculosis Control of the Chicago Medical Society and of the State Medical Society approved the recommendation of the American Trudeau Society and the National Tuberculosis Association regarding the use of vaccination against tuberculosis with

the Bacillus of Calmette and Guerin (BCG). The recommendations encourage active research in the use of the antituberculosis vaccine, but do not include vaccination of the general population at the present time except for carefully controlled investigative programs carried out under the auspices of public health agencies and other specially qualified groups. However, vaccination by qualified agencies is recommended for the various more vulnerable groups of individuals (*"provided they do not react to adequate tuberculin tests"*) such as doctors, medical students and nurses exposed to tuberculosis, hospital and laboratory personnel, individuals who are unavoidably exposed in the home, patients and employees of institutions where the incidence of tuberculosis is high, and "children and certain adults considered to have inferior resistance and living in communities in which the tuberculosis mortality rate is unusually high."¹

More recently releases relative to the use of BCG vaccine have frequently appeared in the public press and magazines to wit: Since 1944 some 30 million Japanese (non-tuberculin reactors) have been vaccinated. In Denmark not a single case of tuberculous meningitis has occurred among BCG vaccinated children during the past eight years. The World Health Organization is spending 2 million dollars (mostly American dollars) on a BCG vaccination program in Europe, and proposes to spend more on an extended program. On April 18th news came from France informing us that BCG vaccination had been made compulsory for non-tuberculin reactors.

With public interest in this preventive measure increasing as a result of these publicized vaccinating programs, and in view of the outstanding contributions educational and voluntary agencies in Illinois have made toward collecting scientifically controlled evidence of the value of BCG, the medical profession of the State could gain public appreciation and contribute to the evidence by stimulating research programs within the limits of the recommendations of the American Trudeau Society as approved by the Committee on Tuberculosis Control of the Illinois State Medical Society.

The report of the Trudeau Society states, "On

the basis of studies reported in the European and American literature, an appreciable reduction in the incidence of clinical tuberculosis may be anticipated when certain groups of people who are likely to develop tuberculosis because of unusual exposure, inferior resistance, or both, are vaccinated." Carefully documented records of the Mayor's Committee of Chicago on BCG vaccination demonstrate an immunity of four to six years in 90 to 82 per cent, respectively, of those vaccinated.

Programs are already under way in various parts of the United States; for example, in New York, California, Georgia, Michigan, Ohio, Wisconsin, Minnesota, Massachusetts, Colorado, and the Territory of Alaska.

An entire community of children in San Francisco is participating in a program under the auspices of the Department of Public Health of the City and County of San Francisco. In Detroit, the Detroit Tuberculosis Sanatorium asked Research Foundation, the non-profit organization that is assisting the BCG programs of the University of Illinois, Chicago Municipal Tuberculosis Sanitarium and other agencies, to provide the vaccine and to promote development of a well-documented project.

The stimulation of a BCG program in local schools in Illinois can be a positive step in the prevention of a disease that is of great emotional and economic interest to the homes and families of the state.

The mounting evidence of the value of BCG in controlling tuberculosis coupled with the investigative resolution of the Society, offers an opportunity for community programs that will add to the documented proof of the vaccine's efficacy.

Through the 13-year effort, originally sponsored by the Tice Laboratory of the Chicago Municipal Tuberculosis Sanitarium and the University of Illinois under the guidance of a Committee of Physicians appointed by the Mayor of Chicago, Illinois is outstanding in the development of production procedures and research on BCG. By encouraging research programs in the schools of your communities, you can help Illinois to contribute further to the application of BCG vaccination toward the eradication of Tuberculosis.

A.C.I.

¹Bulletin of the National Tuberculosis Association, March, 1948.

MEDICAL ECONOMICS.

The Medical Economics Committee. Chauncey C. Maher, Chmn., Hubert L. Allen, Emmet B. Bay, Edwin F. Baker, Carroll Birch, Thomas C. Browning, Roland R. Cross, James Graham, George Halperin, Edwin S. Hamilton, Ford K. Hick, Edwin F. Hirsch, May McDonald Milligan, Marie Wessels, Walter M. Whitaker, Holland Williamson.



State-Aided Cancer Diagnostic Clinics

G. Howard Gowen, M.D.,
Chief Division of Cancer Control,
Department of Public Health,
State of Illinois

In 1941 the Division of Cancer Control, Illinois Department of Public Health, initiated its program for the promotion and financial support of cancer diagnostic clinics in downstate Illinois. In July, 1948, issue of the Illinois Medical Journal the approved policies and procedures relating to the operation of such clinics were presented in detail.

It is the purpose, at this time to briefly discuss the actual service rendered by such clinics to physicians and dentists in downstate Illinois and their patients. In addition, a brief resumé will be given of the amount of money expended in support of such clinics by the Illinois Department of Public Health and the purpose for which it was expended. The period covered by these data is from July 1, 1946, to June 30, 1948.

On July 1, 1946, there were five State-aided cancer diagnostic clinics located as follows:

Burham City Hospital, Champaign

University of Illinois, Research and Educational Hospitals, Chicago
Christian Welfare Hospital, East St. Louis
St. Anthony's Hospital, Rockford
Memorial Hospital of Springfield, Springfield

By June 30, 1948, this number had been increased to nineteen. The locations of the new clinics were as follows:

Menonite Hospital, Bloomington
Graham Hospital, Canton
St. Elizabeth's Hospital, Danville
Marshall Browning Hospital, DuQuoin
The Sherman Hospital, Elgin
St. Francis Hospital, Evanston
Little Company of Mary Hospital, Evergreen Park
Herrin Hospital, Herrin
Passavant Memorial Hospital, Jacksonville
Ryburn Memorial Hospital, Ottawa

Methodist Hospital of Central Illinois,
Peoria
Adams County Cancer Diagnostic Clinic,
Quincy
Savanna City Hospital, Savanna
Victory Memorial Hospital, Waukegan

On the basis of the above statement it can be seen that the quantity of service rendered by these clinics over the two-year period in question does not represent the capacity of nineteen clinics, but represents the service rendered by a variable number of clinics as new ones were gradually established.

The following table outlines the quantity and type of service rendered at these clinics:

TABLE 1

Follow-up of cancer patients (includes patients' return visits to clinics, reports received through family physician, or follow-up by clinic secretary)	13,272
Total attendance of physicians at clinic sessions	10,195
Numbers of patients examined	4,907
Tissues examined (for patients unable to pay)	3,634
Number of malignancies reported	1,532
Number of cancer diagnostic clinic sessions	1,433

The amount of money spent by the Illinois Department of Public Health in support of State-aided cancer diagnostic clinics and the purposes for which it was spent is indicated in the following table:

TABLE 2

Examination of patients	\$98,140.00
Equipment items	48,662.03
Operational costs (includes service of clinic secretary-social worker and expendable commodity items)	26,335.51

Histologic examination of tissues (from patients who cannot afford to pay)	15,514.00
Hospitalization for diagnostic purposes (not to exceed three days)	5,165.40
Special consultants' fees	545.09

Closely associated with the activities relating to State-aided cancer diagnostic clinics were certain professional education projects. These included the sending of health officers to the cancer refresher courses sponsored by the Illinois State Medical Society and the Illinois Division, American Cancer Society; the holding of three institutes on cancer for Public Health nurses; the bringing of outstanding personalities in the field of cancer, at intervals, to various cancer diagnostic clinics for teaching purposes; and the distribution of pertinent cancer educational material to downstate physicians and dentists. The total expenditure for these purposes was \$2,087.45. This phase of our activities is expanding rapidly, and during the next two years the expenditure will be considerably greater.

In order to show the increase in service rendered we have selected comparable periods for three years and these are shown in the table below:

TABLE 3

	Jan. 1, 1946 to June 30, 1946	Jan. 1, 1947 to June 30, 1947	Jan. 1, 1948 to June 30, 1948
Patients examined	478	990	2,007
Follow-up of patients	1,651	1,817	5,268
Physicians attending	1,102	2,068	3,753
Tissues examined	298	722	1,583
Number of clinic sessions	239	340	420

STATE DEPARTMENT OF PUBLIC HEALTH



Licensure of Nursing Homes

Henrietta Herbolsheimer, M. D.
Medical Administrative Assistant to the Director,
Illinois State Department of Public Health

Since 1945, the category of institutions called nursing homes has been subject to licensure in accordance with the law passed by the 64th General Assembly. There are now 339 licensed nursing homes in the State: 268 of them licensed by this Department and the remaining 71 licensed by the municipality in which the home is located. Licensure by a municipality follows from the statutory provision that any city, village or incorporated town may by ordinance regulate the nursing homes within such municipality if the standards defined by the municipality are substantially in compliance with those of the State. The five municipalities which license their own nursing homes are Chicago, with 56 licensed homes; Evanston, with 8; Rockford, with 4; Waukegan, with 2; and Midlothian, with 1.

A nursing home, under the law, is defined as a private home, institution, building, residence or other place which furnishes personal care or nursing for three or more persons who by reason of illness or physical infirmity are unable to care

for themselves. Endowed, fraternal or religious homes which give infirmary care come within the intent of the law as well as the proprietary nursing homes.

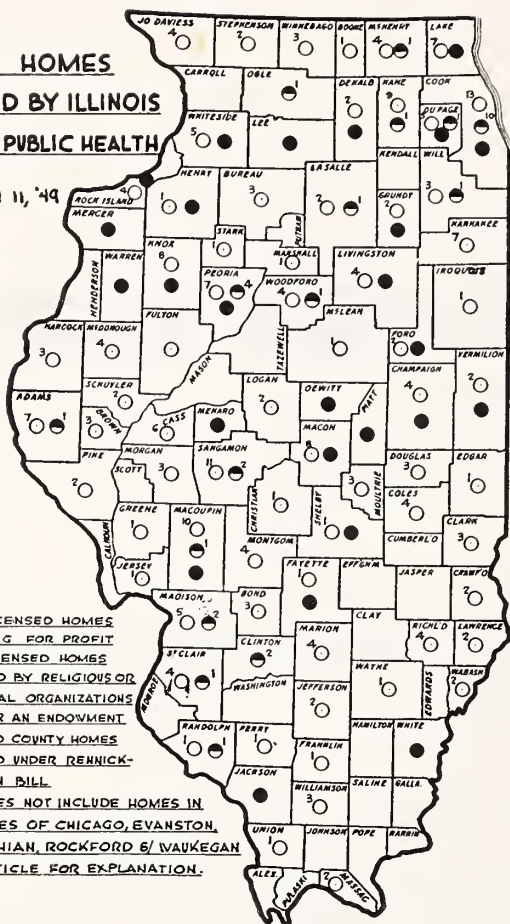
The map shows the geographical distribution of those homes licensed by the Department of Public Health. The figures beside each symbol indicate the number of homes in each classification.

Of the group of nursing homes licensed by the Department of Public Health, 87 per cent are proprietary. Most of these homes are converted large old private residences, which leave much to be desired in the nature of facilities and safeguards for the best interests of the patient. Few have adequate lavatories, utility rooms, dining rooms and kitchens. Sitting room space and grounds are not always available for the semi-ambulatory cases. Elevators are almost unknown, and hazardously steep steps are all too common. Heating and lighting arrangements and laundry

**NURSING HOMES
LICENSED BY ILLINOIS
DEPT. OF PUBLIC HEALTH**

MARCH 11, '49

- STATE LICENSED HOMES
OPERATING FOR PROFIT
 - STATE LICENSED HOMES
OPERATED BY RELIGIOUS OR
FRATERNAL ORGANIZATIONS
OR UNDER AN ENDOWMENT
 - CONVERTED COUNTY HOMES
APPROVED UNDER RENNICK-
LAUGHLIN BILL
- NOTE/DOES NOT INCLUDE HOMES IN
THE CITIES OF CHICAGO, EVANSTON,
MIDLOTHIAN, ROCKFORD & WAUKEGAN
SEE ARTICLE FOR EXPLANATION.



facilities and service are often inadequate. In addition to these customary shortcomings of the nursing home group of institutions, we have found that there is great instability in this class of institution for there are frequent changes in management and often an institution is here today and gone tomorrow.

The 13 per cent of the State-licensed nursing homes which are operated by religious or fraternal organizations or under private endowments are generally better equipped and staffed than the proprietary homes and a few have active programs for their guests.

Realizing the great need for places for domiciliary or custodial care, the Department has endeavored to encourage the continued operation of any place that came within reasonable range of meeting the minimum standards for licensure. Although there have been many adjustments necessary for the homes to meet the basic requirements of safety from fire, it appears that after the Effingham disaster, more stringent precautions may need to be taken in multi-story frame structures. The homes have complied fairly well

with the sanitary regulations but the most difficult problem at this time is the inadequacy of the nursing service. Operators are unable to find enough registered nurses who get along well with old people and who enjoy giving care to patients whose prognosis generally is not encouraging. It is especially trying to expect that nurses trained in the streamlined efficiency of the hospital will be content to work in an environment which does not offer the usual conveniences for service. Nurse-aids of all varieties of experience, training and years are found in some homes and the quality of care for the patients varies accordingly.

The Department, through its field inspection team which consists of a registered nurse experienced in this category of service and a sanitary engineer, is engaged in efforts to assist the management of the nursing homes to improve care. This year the Department will sponsor a series of meetings in scattered areas of the State in order to bring the operators of the homes together to discuss their problems in nutrition, nursing care, housekeeping, accident and fire prevention, diversion of patients' interest from their handicaps, and in the keeping of adequate nursing records. The Department is encouraging operators of the larger homes to provide an examining and treatment room for the convenience of the physicians and the patients. We are trying to establish closer working relationships between the nursing homes and community general hospitals in order to facilitate transfer of patients in accordance with the patient's needs and the physician's orders.

The problem of the nursing home as we see it today is largely a problem of the aged. A recent tabulation of patients by age group in Chicago nursing homes (Study by the Welfare Council of Metropolitan Chicago) shows that of 2400 patients, 75 per cent were 75 years of age or older, and only 1 per cent was less than 65 years of age. A survey of the 13 (388 beds) licensed nursing homes in Sangamon County in September 1948 showed that 98 per cent of the guests were 65 years of age and over. These percentage distributions in selected areas are probably applicable to most sections of the State.

With these elderly patients, uprooted from their usual environments, separated from their families, and ailing, the operators of nursing

homes do not have an easy job. Although some patients have very simple wants, others experience needs which are exacting and exhausting. For the most part, old people want privacy, and they want space to keep a few of their treasured old and familiar possessions about them. They want to get out of doors occasionally and they want to be able to move around without walking up and down steps. The patients need diversional and occupational therapy. But, the busy operator, who is trying to provide food, shelter, linens and nursing and still make a profit classifies these adjuncts to mental hygiene as luxury items and feels there is no advantage in spending money for crafts and hobby materials and the personnel to stimulate their use. Active rehabilitation programs for the geriatric cases are virtually unknown.

With our aging population, the demands for facilities and services for the elderly are bound to increase. To medical science, to which goes the credit for this phenomenon also goes the responsibility of sharing in the solution of the problem. Many of the patients now lodged in nursing homes (and in our community general hospitals) could to a large extent take care of themselves with safety and satisfaction in small apartments which offered a central management to check on the welfare of guests at odd hours and as needed. In such an arrangement, a common dining room in which each guest was required to take one meal a day could assist in assuring that the aged would avoid the all too common nutritional deficiencies of the infirm and edentulous.

A noteworthy experiment is going on along these lines in England where the Nuffield Trust, a private philanthropic agency, has undertaken the development of special community housing for the aged and infirm. Preliminary reports in the "Lancet" (May 15, 1948) indicate considerable success in arriving at some desirable solutions to the problem of happiness in the golden years of life.

Until such time as other more suitable arrangements can be made, the people of Illinois can only temporize with measures to improve the quality and quantity of care that may be had in private nursing homes and in encouraging the conversion of all suitable county poor farm residences into "convalescent" facilities. Some might hope for more private, non-profit institutions, but, with the general downward trend of endowments and the expected upward trend in our aged population, this hope is not likely to meet with fulfillment.

The Department appreciates that the Nursing Home Licensing Law will not increase the number of available facilities but it is a means to increase the adequacy of care in those places which are in existence. Physicians working individually and through community health agencies, particularly the local health departments, can exert a significant influence on the nursing home as a more adequate community health and welfare facility. The county medical societies may consider developing a program to stimulate social and fraternal organizations to recognize the areas of service that such organizations might find in the nursing homes. Social organizations can provide educational, occupational and recreational therapy. Through concerted community action, the effects of the licensure program of this Department can be increased and the stigma now associated with "nursing home care" can to a great extent be removed. With better nursing homes, the number of the custodial and domiciliary cases now residing in general hospitals and State mental institutions can be greatly reduced and the limited hospital space made available to patients in acute need of the specialized facilities of the hospital. For the custodial case, in turn, the ideal nursing home would provide all of the care he was accustomed to getting at the hospital and it would, in addition, provide the flexible regime and the home-like atmosphere basic to happiness.

CORRESPONDENCE



CLINICS FOR CRIPPLED CHILDREN LISTED FOR JULY

The University of Illinois Division of Services for Crippled Children has 19 clinics scheduled for July. Dr. Herbert R. Kobes, director of the Division, reported that 14 are to be general clinics where diagnostic orthopedic, pediatric, speech and hearing examinations will be made; 4 are to be for children with rheumatic fever and 1 for children with cerebral palsy. Private physicians may refer or bring children to a convenient clinic for examination or for consultative service.

A total of 2,707 children attended clinics during the first 4 months of 1949 showing a 10.5 per cent increase over the same 1948 period.

The July schedule is as follows:

- July 6—Joliet, Will Co. TB Sanitarium
- July 7—Hinsdale Sanitarium
- July 7—Cairo, Public Health Building
- July 8—Chicago Heights (Rheumatic Fever) St. James Hospital
- July 12—Peoria, St. Francis Hospital
- July 12—East St. Louis, Christian Welfare Hospital
- July 13—Evergreen Park, Little Co. of Mary
- July 13—Salem, American Legion Center
- July 14—Elmhurst (Rheumatic Fever) Elmhurst Community Hospital
- July 19—Danville, Lake View Hospital
- July 20—Sterling, Sterling Public Hospital

- July 21—Rockford, St. Anthony's Hospital
- July 21—Mt. Vernon, American Legion Home
- July 22—Chicago Heights (Rheumatic Fever) St. James Hospital
- July 26—Peoria, St. Francis Hospital
- July 26—Effingham (Rheumatic Fever) American Legion Home
- July 27—Springfield (Cerebral Palsy) St. John's Hospital
- July 27—Alton, Alton Memorial Hospital
- July 28—Bloomington, St. Joseph's Hospital

These diagnostic clinics are conducted by the Division in cooperation with local medical and health organizations. The physicians who serve on the various clinics staffs are private physicians who are certified Board members. The follow up work on the children is based largely upon their recommendations for treatment and care.

YOUR MENTAL HOSPITALS — "Homes in Place of Hospitals"

In 1885 the Commonwealth of Massachusetts adopted an idea that had been in vogue for years in Europe. This was a program of placement of improved mental patients in homes in the community. It was not until the late thirties that this plan developed any great impetus. At the present time, there are ten states of the United States and one province of Canada utilizing this procedure of home placement or family care. These include the States of Rhode Island, Mary-

land, New York, Michigan, Pennsylvania, Massachusetts, Nebraska, California, Ohio and Illinois and the Province of Ontario, Canada.

Patients may have improved sufficiently from their mental illness to leave the hospital but due to family circumstances or inability to adjust in their own homes, they cannot be released. It may be possible to place these patients in a "foster home" type of setup.

Home Placements are made by the Social Service Department of the institution; after careful consideration by the medical staff. Homes are found to fit the needs of patients. The patient continues under the supervision of the hospital and may be returned if necessary to the hospital without any legal formalities. He may also be returned to the hospital temporarily for medical or surgical care, while in this status.

The outstanding purpose of this program is a therapeutic one to help patients become self-respecting members of a normal community. It gives the patient an opportunity to progress from a protected environment as provided by the hospital to a protected place in the community bringing with it a therapeutic benefit and increased happiness which can only be derived by living in the understanding atmosphere of a normal home and being accepted as a respected individual in a normal society.

During the last seven years over 2,800 patients from the Illinois State Mental Institutions were placed on family care. Seven hundred patients are now in homes in communities under this plan. Approximately two-thirds of the 700 were from institutions for the mentally ill and one-third from the hospitals for the mentally deficient.

The Department of Public Welfare makes monthly payments for the care and treatment of many of the patients, however, there are a number of cases who help support themselves and earn wages while on this placement. Recently one of the patients visited the superintendent of a hospital and asked his advice on the method of preparation of an income tax return. She had earned sufficient money to necessitate the filing of an income tax form.

The placement of improved mental patients, after careful screening by the medical staff, is an accepted method of caring for mental patients and is beneficial toward their future adjustment, improvement and recovery. Their final re-

adjustment is in a normal environment — the environment of a home. The medical profession can assist in this program by explaining this procedure to the lay public and by their recommendations for family care placements.

George A. Wiltrakis, M. D.
Deputy Director
Medical and Surgical Service

HARVARD MEDICAL SCHOOL POSTGRADUATE COURSE

The annual postgraduate course in the Modern Treatment of Fractures and Other Traumatic Conditions, will be given at the Massachusetts General Hospital October 24 to November 3, 1949. This course, under the auspices of the Harvard Medical School, will cover in detail, the field of fractures and fracture treatment, in addition to the many types of traumatic injuries seen generally today.

The course is covered by the GI Bill of Rights. For further information, write to Harvard Medical School, 25 Shattuck Street, Boston, Massachusetts; Assistant Dean, Courses for Graduates.

CHICAGO MEDICAL SOCIETY ANNOUNCES TWO POSTGRADUATE COURSES

The Chicago Medical Society is offering two postgraduate courses in October, 1949, each of one week duration, which will be open to all physicians who are members of their local medical societies.

A course in Cardio-Renal and Peripheral Vascular Diseases will be given October 17th to 22nd, and a course in Obstetrics, Endocrine-Gynecology and Sterility will be offered the following week, October 24th to 29th, 1949.

The courses will be given at Thorne Hall on Northwestern University Medical School campus. There will be lectures, question periods, round tables, and short intermissions in the morning and afternoon when those attending may meet the speakers, and others taking the course.

Each course is limited to one hundred. Those interested in attending may secure additional information by writing Dr. Willard O. Thompson, Chairman, Committee on Postgraduate Medical Education, Chicago Medical Society, 30 North Michigan Avenue, Chicago 2, Illinois.

CIVILIAN DOCTORS SOUGHT FOR PANAMA CANAL ZONE

Permanent appointments for physicians in the Civil Service now exist in the Panama Canal Medical Service according to an announcement from the Office of The Panama Canal, Washington, D. C.

Due to the high appeal of the health and living conditions in this tropical country, the number of appointments to be made is limited, and early applications are suggested, by the Panama Canal Office, from physicians who desire the opportunity for training and experience in tropical medicine under standard American living conditions.

Starting professional salaries are \$5599 and \$6540 a year, with free transportation to the Canal Zone provided for physicians, their families and household goods. In addition, doctors who receive appointments get two months paid vacation (including time lost by illness) and reduced fares on Panama Line passenger vessels.

Requirements for professional medical positions starting at \$5599 are: Graduation from an approved medical school; license to practice medicine in a State; ability to pass a standard physical examination; completion of one year's internship in a hospital approved by the American Medical Association.

Requirements for professional medical positions starting at \$6540 are the same except that a minimum of three years of post-internship experience is required.

The Panama Canal Health Department operates several hospitals and a number of well-equipped dispensaries offering excellent professional opportunities. The Health Department also maintains constant vigilance over the health conditions of the Canal Zone and the adjacent cities of Colon and Panama City in the Republic of Panama. So effective have been the methods of sanitation and maintenance of health standards, that there is no more danger of contracting an infectious disease in the Canal Zone than in the United States.

Living conditions there are comparable to those in a small town in the United States, except for a fully tropical climate and the fact that food, clothing, and certain other necessities are obtained through government commissaries. The public school system compares favorably with

modern American school systems, and excellent facilities for educational work are provided to children of employees without charge from kindergarten through high school.

Further information is contained in a pamphlet entitled "The Panama Canal — Employment Information and Personnel Policies", copies of which may be obtained by writing the Chief of Office, The Panama Canal, Washington 25, D. C.

Physicians who are interested in a position as medical officer in the Panama Canal Zone should address their applications to the above address. Applications may also be submitted to the U. S. Civil Service Commission, Washington 25, D. C.

POSTGRADUATE COURSE IN UROLOGY

The first Post-graduate Course in Urology to be sponsored by the North Central Section of the American Urological Association will be held at the Hotel Sherman, Chicago, Illinois, December 5-9, inclusive, 1949.

All members of the North Central Section are invited to attend. In addition, the Courses will be open to residents in Urology and to physicians who are interested in a short post-graduate course in Urology.

The attendance will of necessity be limited and early reservations are requested. The tuition fee will be \$50.00.

The Hotel Sherman has set aside ample accommodations for out-of-town urologists. There is a garage in this hotel.

Address applications and requests for information to Dr. William J. Baker, 7 W. Madison Street, Chicago 2, Illinois.

REFRESHER COURSE IN OBSTETRICS

A one week Refresher Course in Obstetrics and Gynecology sponsored by the Illinois State Medical Society, the State Department of Public Health, and the University of Illinois will be given at the Research and Educational Hospital beginning July 11th. It will consist of formal lectures, clinical conferences, round table discussions, manikin demonstrations, ward walks and out-patient clinics. The staff of the Research and Educational Hospital plus invited lecturers from Northwestern University, Loyola Univer-

sity and the University of Chicago will give the course.

The program will occupy the time from 9:00 to 5:00 daily. The course will be limited to 20 men and will not be given for less than 10. Registration closes July 1st. Registration fee \$10. Accommodations for room and board can be arranged at the nearby Professional Schools Y.M.C.A.

Apply for registration in course to Dr. F. H. Falls, 1853 West Polk Street, Chicago 12, Illinois.

DAVIS NAMED TO GRUNOW CHAIR IN SURGERY

Dr. Loyal Davis, professor of surgery and chairman of the department in the Northwestern University Medical School, and chief of staff of

Passavant Memorial Hospital, has been appointed the first Grunow Professor of Surgery, it was announced recently by Dr. J. Roscoe Miller, dean of the school. The chair in surgery was established last February with a gift from the Lois Grunow Memorial Clinic, Inc., of Phoenix, Ariz.

A graduate of Knox College and Northwestern University Medical School, Dr. Davis has been a member of the faculty since 1925 and chairman of the department of surgery since 1932.

Both the surgical fund and the professorship were named in memory of Lois Grunow, who died at the age of seven, by her father, William C. Grunow of Lake Geneva, Wis., chairman of the clinic's board of directors. He founded the clinic in 1930 and has been its principal donor.

MEDICINE FOR BURNS DANGEROUS, DOCTORS WARN

Foille, a preparation for relief of burns, may cause fatal poisoning when used according to directions of the manufacturer, warn Thomas D. Cronin, M. D., and Raymond O. Brauer, M. D., Houston, Texas, in the March 19 issue of The Journal of the American Medical Association.

The two doctors report a case of poisoning and death from carbolic acid contained in foille.

The patient was a 10 year old boy treated for severe burns with dressings saturated with the preparation. The doctors do not say where the death occurred.

Foille should be withdrawn from the market immediately, the doctors recommend.

EMERGENCY CALLS

One of the most troublesome, and—from the standpoint of our public relations—most delicate problems is that of assuring every potential patient a ready access to the services of a general practitioner when a personal or family emergency occurs.

Everywhere in the nation there is a growing demand for the medical profession to set up organized facilities to handle emergency calls. The public feels that it is our collective responsibility to make medical service readily available when a person is unable to reach his family doctor in an emergency, or if he has no recognized family physician. On too many occasions, some of our patients have had a bad time of it trying to locate a doctor.—J. H. Hornberger, M. D., in J. Med. Soc. N. J.

ORIGINAL ARTICLES



The Challenge

The President's Address

**Percy E. Hopkins, M.D.,
Chicago**

A year ago at this time, this Society met here in a generally relaxed and comfortable frame of mind. In common with many other Americans, we thought that the ragtag and bobtail leavings of the New Deal were soon to be driven out of Washington and that the leftist pressures for the welfare state, including compulsory sickness insurance, would soon be eased. There would be time, we thought, to build up our voluntary insurance programs and to tell the American public of the evils of State Socialism at leisure.

It is not necessary here to review the story of the blasting of that pleasant prospect. By its vote, the American public, according to its right, decided to retain the New Deal — now unaccountably called the Fair Deal — and our com-

placency was rudely upset. We found ourselves back in the foxholes required to fight for freedom.

More than that, we found that the attack was imminent. The left wing announced that the Administration had a "mandate" and that the American public had demanded by its vote immediate enactment of all the welfare fantasies rejected by this nation since 1912. Socialized medicine was about to be pushed through Congress in 60 days, according to one story. The "blitzkrieg" was on us.

But that prospect was also upset. A strong segment of Senators and Congressmen, disturbed at the socialistic tendencies of much of the administration program, offered solid resistance that threw its timing out of gear. Medicine thereby got a breathing-spell. Although, as I

Delivered at the 109th Annual Meeting, Illinois State Medical Society, May 16, 1949.

speak, a Senate subcommittee is opening hearings on S. 1679, the latest legislative formulation of the compulsory sickness scheme, our best guess at the moment is that the "big push" from the Left will not come until next fall and winter. The artificial "mandate" the Left tried to create out of a strictly political campaign seems to have been countermanded.

In the meanwhile, American medicine had acted. Within a month after election, the House of Delegates had voted all the weapons, finance and manpower needed for the fight. That unanimous vote at the interim session in St. Louis was a defiance of Socialism and a declaration of war against it. There have been a few derelictions among our ranks, but in general I am certain that American medicine has accepted its responsibility. It sees itself as the area in which Socialism seeks to establish a beachhead from which to spread its blight all over our nation and it is determined to resist the invasion. It knows that it is fighting, not alone for the freedom of medicine and the health and welfare of our people, but for the very life of our country, its free enterprise, its capitalism, its individualism.

If our enemies were to establish that beachhead, life would never be the same in this country of ours. We would all become prisoners of the welfare state, condemned forever to its hopeless monotony, its defeatism, its serfdom. That is what we are fighting. In its place, we offer through voluntary insurance and the other elements of the 12-point program of the A. M. A., everything that is necessary for the health and welfare of the people, plus retention of American standards of social, political and economic freedom.

It is customary for a retiring president to review the major events in the history of the Society for the last year and to interpret them to the membership with recommendations for the future. I am dispensing with that formality here to confine myself to the socialization issue, in part because I have covered the affairs of the Society in my report as president and the reports of other officers and committees available in the handbook describe their activities, but even more because I believe that this battle we have now joined is so important that we must devote all possible attention to it. I direct your attention, therefore to the reports in the handbook, notably those of the president, chairman of the council,

committees on medical service and public relations and on voluntary prepayment insurance.

In them and in the scientific papers to be delivered before this 109th annual meeting you will find the record of our activities.

For my own part here, I urge you to give as much time and energy as you possibly can to the National Education Campaign, the program by which your medical organization intends to rally the American public to stamp out the Socialist infection in our midst. Learn what it means. Learn the part you must play in it. Resolve to carry your share.

You are familiar with the facts. A \$25 assessment was levied on every member of the American Medical Association to provide funds. A public relations firm, Whitaker & Baxter, experienced in this type of campaign, has been engaged to carry out the program. Two major immediate objectives were set up: First to defeat S. 1679, and second to promote by every means at hand the public acceptance of all suitable forms of voluntary prepayment insurance. A 12-point program meanwhile has been outlined to specify the broader objectives toward which we are working. Responsibility has been placed on each state society to recruit its forces and organize activities within its jurisdiction. In general the program is one of direct appeal to the public, individually and through every sort of organization by every sort of approach.

The state societies, in turn, carry out their role through the county or branch societies and they through individual members and special committees, with the state exercising a coordinating and supplementary role as required. Thus while the national or state groups can prepare and print pamphlets, it is for the county society to distribute them through their members within their jurisdiction. The state society can prepare material for speakers; the county society must recruit and assign suitable speakers, organize or seek out opportune meetings, and report on their activities. The tests of effectiveness of any group are the numbers of talks given, the numbers of person reached and stimulated to definite action, the numbers of group resolutions obtained and forwarded to Washington, the numbers of individual letters written to Senators and Congressmen, the general alignment of public sentiment in the community on our side.

A brief effort is not enough. This is a long-term fight. Every doctor and every society must take active part in this fight, but, even more, must be prepared to maintain his level of activity for the duration — until permanent victory has been won. We must keep at it everlastingly.

Illinois' record so far has been generally good, except in spots. Some county societies and some branches have done well, both absolutely and in cooperation with the state society. Others have done a good job, but have failed to make their efforts keyed-in parts of the common cause. A few have failed rather badly, in organization, in activity, and in cooperation. It is not my intention here to fix any blame or cast any reflections. I appreciate the difficulties some component groups are facing and I do not want to make their task more difficult.

But I say to you that you must see to it that your society accepts its responsibility and that every member does his share individually. Name a committee, if you have not already done so, with an aggressive chairman able and willing to devote himself to the work. Make a program adapted to your own local needs. Place it on record and report its activities. If you need help, it will be forthcoming; do not hesitate to seek consultation. There are many ideas available. Find out about them and set up machinery to put them to work.

When the final tally is in, I believe that at least some 85 per cent of our members will have paid their assessment. That is a high and gratifying proportion. It means that the overwhelming majority of our members in American principles and want to preserve them. But it is not enough to pay your assessment and leave the rest

to some one else. Not every one can be an effective speaker, but he can use various other methods of reaching the public. Many individuals are doing well among their own patients and patients' families with letters and pamphlets and private conversations.

In the meanwhile, too, we are finding much support and many allies. The American Legion, for instance, has lined up with us, recognizing the patriotic nature of the fight. Only recently the General Federation of Women's Clubs, representing 5,000,000 women of America, declared against the socialization scheme in spite of the most determined efforts of the Federal Security Administration. Great credit is due those representatives of the A. M. A. and Whitaker & Baxter who presented our case there. And the great farm organizations, whose members certainly need more medical care, have nevertheless realized the Socialistic menace underlying the attack on medicine, and declared for us.

Within the last month, the weight of the Catholic Church has been thrown into the balance on our side. There are many other such groups, large and small. We are not alone.

But the prime responsibility is that of medicine and the task is one for every doctor to carry out. I close my term as your president with an earnest appeal from the heart that every one of you will accept the duty imposed on you. Your patients, your profession, your country, demand it of you. It is time now to stand up and be counted. Out of your effort, out of these fires of persecution will come a greater, stronger, better medical profession and all that it means for the welfare of our fellow men and of our nation.

Vagotomy In The Treatment of Gastro-Intestinal Ulceration

Arkell M. Vaughn, M.S., M.D., F.A.C.S.
Chicago

The greatest contribution to gastric surgery began in 1881 when Billroth performed the first successful pylorotomy. Other renowned surgeons made contributions in the interim up to 1919 when cholecystogastrostomy was performed by Babcock. The next advance in gastric surgery was resection of the head of the pancreas for carcinoma in 1938 by Whipple and associates, known as the "Whipple operation". The most recent contribution to gastric surgery was by Dragstedt in February, 1943, when he resected the vagi nerves in man above the diaphragm for gastro-intestinal ulceration. This operation is commonly called "vagotomy".

Most new procedures in surgery are at first subjected to much discussion both pro and con, as they rightly should be, until the merits of the procedure are firmly established. Such is the case in this most recent contribution and many have probably read or heard these discussions and are left in a quandry as to its relative merits if any.

New surgical procedures today are first performed in the animal experimental laboratory where anatomical, pathological, chemical and physiological observations are made and technic is perfected. This was done by Dragstedt over a period of years before the operation was performed on humans.

GASTRIC SECRETION

There are two phases of gastric secretion; namely,

1. *The hormonal or chemical*: Food and digestion products acting on the pyloric mucosa of the stomach form a hypothetical hormone or secretagogue called "gastrin". This secretagogue

From the Stritch School of Medicine of Loyola University, Mercy and Cook County Hospitals, Chicago, Illinois.

Delivered before The Postgraduate Conference of the Fourth Councillor District, Monmouth, Illinois, and The Postgraduate Conference of the Second Councillor District, LaSalle, Illinois, of the Illinois State Medical Society.

is supposedly absorbed into the blood stream and is carried through the systemic circulation to the glands of the fundus and body of the stomach where it induces secretion of hydrochloric acid. This is the phase of gastric secretion upon which Ivy is experimenting with "enterogastrone".

2. *The neurogenic or cephalic factor*: The left anterior and right posterior vagi nerves enter the stomach wall along the lesser curvature to innervate the mucosa. Nervous and phsyhic factors, such as fear, anger, or excitement, cause hypersecretion by way of the vagi. Excessive, continuous secretion of gastric juices occurs in most patients with gastroduodenal ulcer in the absence of any known type of gastric secretory stimulus. The reduction in the gastric secretion produced by complete division of the vagi nerves to the stomach indicates that hypersecretion is neurogenic in character. It is this neurogenic phase upon which Dragstedt experimented with animals by cutting their vagi nerves.

EXPERIMENTAL WORK

A series of dogs was taken by Dragstedt and the stomach isolated with the vagi nerves intact. The gastro-intestinal continuity was established by bringing up a loop of jejunum and attaching it to the stump of the esophagus. A cannula was placed in the stomach and

1. The amount of secretion in 24 hours measured.

2. The acidity tested, and

3. A balloon was placed in the stomach and a kymographic tracing made of the gastric peristalsis.

After a series of these experiments were recorded the dogs were re-operated. The vagi nerves were completely resected and the above 1, 2, and 3 observations made. It was found that, first, the amount of gastric secretion was markedly reduced; second, the free gastric acidity markedly or totally reduced; and third, the gastric peristalsis reduced markedly in amplitude and occurrence.

CLINICAL APPLICATIONS

Medical treatment of peptic ulcerations is based mainly upon the following three factors:

1. Reduction of the gastric secretion.
2. Reduction of gastric acidity by giving ant-acid medications.
3. Reduction of gastric motility.

Complete resection of the vagi nerves accomplishes the above. Early the patients may have excessive reduction of motility and may have gaseous distention of and retention in the stomach, but this usually corrects itself within six to twelve months.

I do not want to imply that surgery is to be used for every case of gastroduodenal ulceration. It is not. Every patient should first be given the benefit of adequate medical treatment and a large percentage will respond favorably. Surgery is indicated for the complications of peptic ulcer and for those patients who do not respond to medical management. Surgery is indicated only in those cases of peptic ulcer which develop complications, such as perforation, benign pyloric obstruction, repeated hemorrhage, fear of malignancy, and those intractable to medical treatment.

INDICATIONS

The success of any operation depends primarily upon the indications for which it is performed. There are probably many vagotomies being performed without proper indications and most likely with poor results.

The indications for vagotomy are not as yet standardized. We have used the following indications in our series of thirty-four vagotomies since May, 1946:

1. Jejunal or marginal ulcer. Two cases. This is one indication upon which most surgeons will agree.
2. Duodenal ulcer.
 - A. Previous perforation. Four cases.
 - B. Benign pyloric obstruction. Thirteen cases.
 - C. Hemorrhage. Repeated attacks. Nine cases.
 - D. Intractable to medical therapy. Five cases.

Gastric ulcers are not an indication for vagotomy since ten per cent or more are or may become malignant. Gastric resection is the operation of choice. Gastric resection plus vagotomy was performed in one case in this series.

PREOPERATIVE TESTS AND PREPARATION

The amount of night secretion from 8 P.M. until 8 A.M. should be recorded and tested for total, free and combined acidity. This can be accomplished by inserting a Levine tube connected with a Wangenstein suction apparatus and collecting the secretions in a bottle. If possible, this should be repeated several times. Repeated Ewald meals are likewise desirous.

The Hollander insulin test should be run in all cases if possible. Fifteen or twenty units of regular insulin are given intravenously at 8 A.M. The amount of secretion and the total free and combined acidity is recorded at 8:30, 9:00, 9:30, 10:00, and 10:30 A.M. At 10:00 A.M. the blood sugar is determined.

The patient should have in addition the routine preoperative tests and preparation and should go to the operating room with a Levine tube in the stomach.

OPERATIVE PROCEDURE

Intratracheal gas anesthesia is preferred by most surgeons.

The first five cases were operated upon by the transthoracic approach. This approach has been abandoned almost universally since the surgeon is not given the opportunity of exploring the lesion. The transabdominal approach was employed in the last twenty-nine cases. This approach allows the surgeon to explore the lesion and decide whether an emptying operation, as gastroenterostomy or pyloroplasty, is indicated in addition to the vagotomy.

The *indications* for the specific operative techniques in this series were as follows:

1. *Vagotomy alone*
 - A. Jejunal or marginal ulcer.
 - B. Previous hemorrhage without retention.
 - C. Intractability without retention.
2. *Vagotomy plus posterior gastro-enterostomy*
 - A. Benign pyloric obstruction.
 - B. Previous perforation. (Prophylactic against subsequent fibrosis.)
3. *Vagotomy plus gastric resection* in a proven benign gastric ulcer. (Prophylactic against formation of marginal ulcer.)

In this series vagotomy alone was performed in 16 cases.

Vagotomy plus posterior gastro-enterostomy was performed in 15 cases.

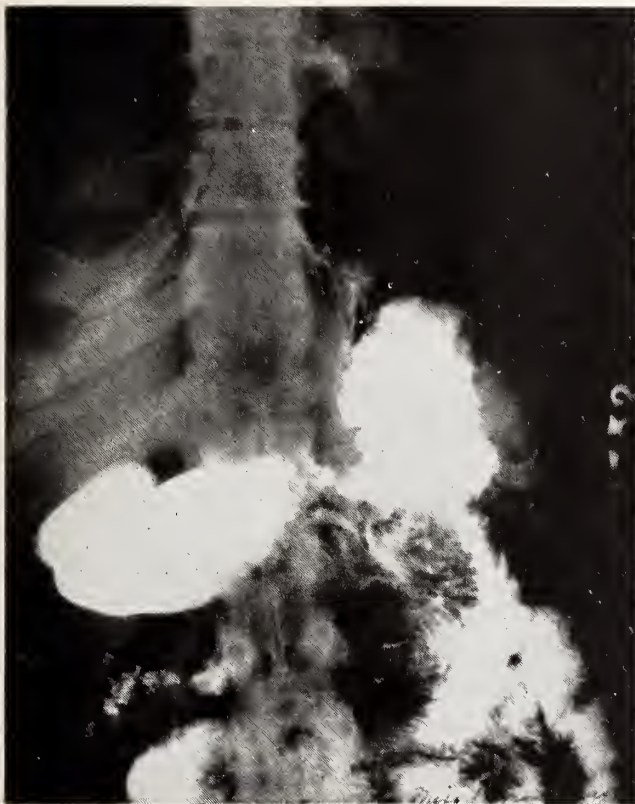


Figure 1. E.C. One month postoperative. Vagotomy plus posterior gastro-enterostomy.



Figure 2. E.C. Nine months postoperative. Vagotomy plus posterior gastro-enterostomy.

Vagotomy plus gastric resection was performed in 3 cases.
Total 34 cases.

Only one case of gastric ulcer was treated in this series and that one had a gastric resection plus vagotomy. The other resected case was a duodenal ulcer with obstruction.

POSTOPERATIVE CARE AND STUDIES

The routine postoperative care following gastric surgery was given. The Wangenstein suction was continued from three to five days. Decompression for five days is desirable to offset gastric distention. The night secretion was collected, measured, and tested for acidity, as preoperatively, each night the tube was in the stomach. The Hollander insulin test was repeated as before. If no free acidity is found after this test the surgeon feels reasonably assured that he has severed all the vagi fibers, which apparently is necessary in order to obtain the desired results in treating gastro-intestinal ulcerations. Upon removing the Levine tube, the patient is given small amounts of liquids. These are gradually increased until they gradu-

ate to soft food and finally a general diet. The patients are instructed to stop eating when gastric distention occurs and to eat small amounts frequently until they can tolerate a general diet.

COMPLICATIONS

The following complications were encountered in our series:

1. *Gastric distention with retention of food* was the most frequent complication. The condition usually corrects itself spontaneously in three to twelve months. Urecholine, one 5 mg tablet three times daily after meals, usually gives immediate relief. Figs. 1, 2, and 3 are roentgenograms of a patient, who had a vagotomy plus posterior gastro-enterostomy, at one, nine and eighteen months postoperatively. Figs. 4, 5, and 6 are roentgenograms of the same patient and the same time interval, taken five hours after a barium meal. Gradual disappearance of the distention is noted. There still is a small amount of retained barium in five hours after eighteen months. The patient, however, has no complaints referable to her stomach.

Distention may occur whether the patient has a vagotomy alone or whether combined with a



Figure 3. E.C. Eighteen months postoperative. Vagotomy plus posterior gastro-enterostomy.

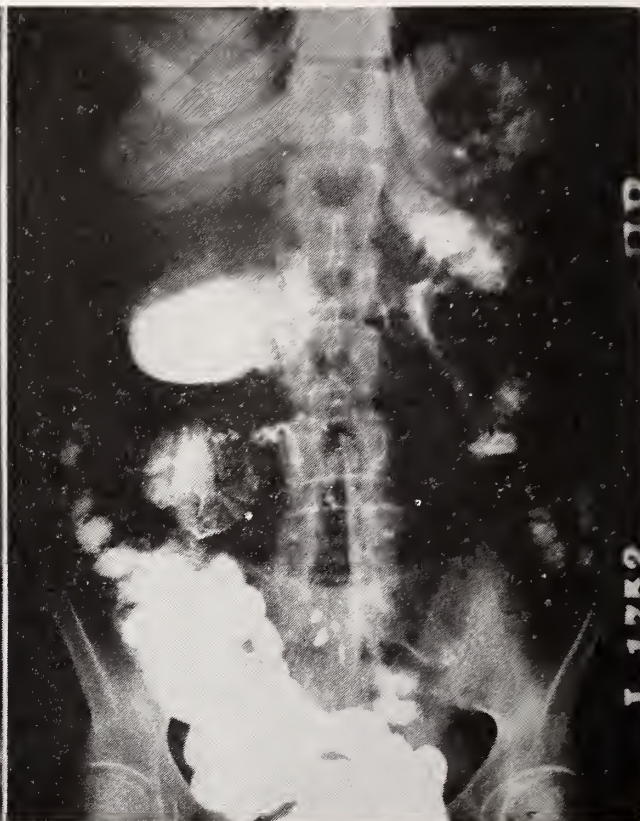


Figure 4. E.C. Five hour roentgenogram. One month postoperative. Vagotomy plus posterior gastro-enterostomy.

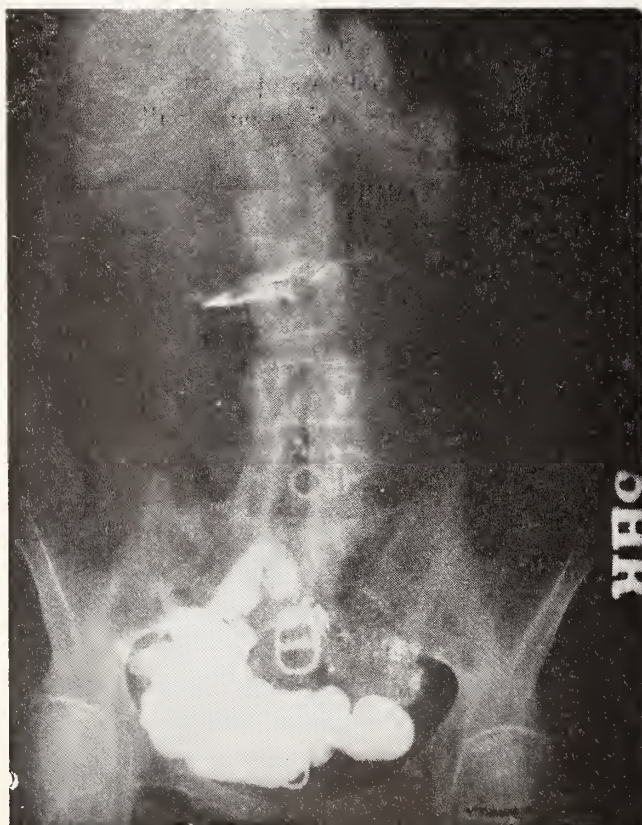


Figure 5. E.C. Five hour roentgenogram. Nine months postoperative. Vagotomy plus posterior gastro-enterostomy.



Figure 6. E.C. Five hour roentgenogram. Eighteen months postoperative. Vagotomy plus posterior gastro-enterostomy.



Figure 7. C.J. Five hour roentgenogram. Immediately postoperative. Vagotomy plus partial gastric resection.



Figure 8. C.J. Five hour roentgenogram. Six months postoperative. Vagotomy plus partial gastric resection.

posterior gastro-enterostomy or gastric resection. Figs. 7 and 8 are five hour roentgenograms of a patient, who had a vagotomy plus partial gastric resection, immediately and six months postoperatively. Immediately after, there is both distention of the stomach and retention of food, while six months after there is some distention but very little retention. The patient clinically has a good result.

Distention is more likely to occur in patients who have a vagotomy alone, especially if a previous *perforation* has occurred. Figs. 9 and 10 are five hour roentgenograms of a patient, who had a vagotomy only, seventeen days and sixteen months postoperatively. Sixteen months after, there is considerable five hour retention. This patient had a previous perforation. He was the second in our series and was operated by the transthoracic route; hence, no exploration of the stomach was done. By the transabdominal route the pyloric ring can be examined and if scar tissue is causing an obstruction a posterior gastro-enterostomy can be supplemented with the

vagotomy. For the above reasons I am supplementing posterior gastro-enterostomy with vagotomy in all patients with a history of previous perforation. This patient clinically has no complaints.

2. *Diarrhea* has been a much discussed complication. In our series, only one severe and three mild cases were encountered. They were transitory and occurred usually while the patient was in the hospital. Dilute hydrochloric acid, ten drops in water three times daily during their meals, seemed to control this complication more effectively than any other drug. Many patients who were constipated before vagotomy state their bowel habits are much improved.

3. *Belching of foul gas* was encountered in three patients. This usually occurred in patients where gastric retention was marked. When the stomach empties normally this complication usually disappears.

4. *Dysphagia* was encountered in two cases, beginning on the seventh to tenth postoperative day. One was probably edema from trauma to

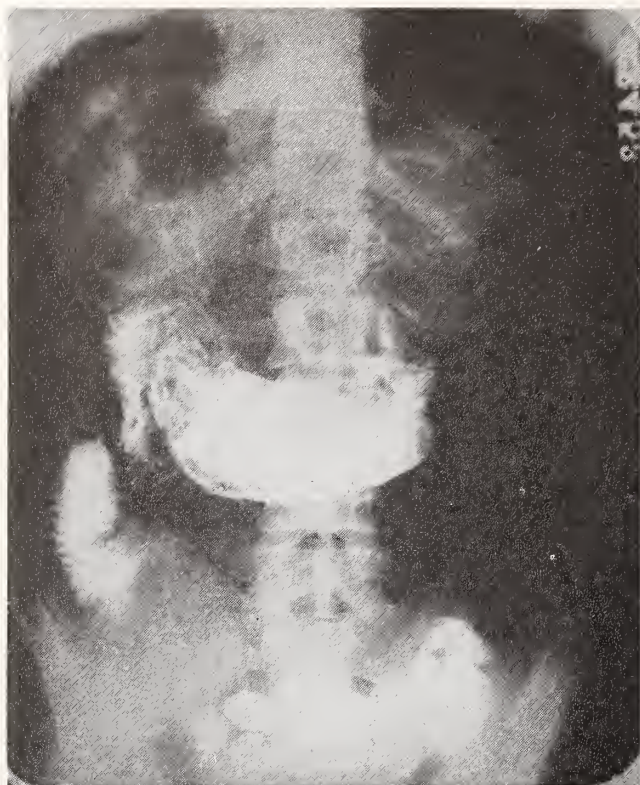


Figure 9. J.P. Five hour roentgenogram. Seventeen days postoperative. Vagotomy only.

Figure 10. J.P. Five hour roentgenogram. Sixteen months postoperative. Vagotomy only. Note: Although there is still five hour retention, this patient has no complaints.

the esophagus following surgery and subsided spontaneously within a few days. The other appeared to be a cardiospasm. This was relieved by etamon (tetra-ethyl-ammonium chloride), 5 c.c. daily until symptoms disappeared.

5. *Atelectasis and/or pneumonia* was encountered in five of our earlier cases.

6. *Wound complications* developed in four cases who had pulmonary complications. There was one evisceration, two disruptions, and one dehiscence.

7. *Pulmonary embolism with infarction* was encountered in two cases.

8. *Phlebothrombosis* developed in one case.

9. *A torn splenic vessel* with part of the splenic capsule was encountered during surgery in one case. A splenectomy was done to control the bleeding.

There were *no deaths* in this series in spite of the numerous complications which were encountered early in the series.

RESULTS IN THIRTY-THREE CASES OF VAGOTOMY

The results in our series are as follows:

1. *Volume of night secretions*

Preoperatively 576.7 cc. average
Postoperatively 336.7 cc. average

2. *Free acidity of gastric contents*

Preoperatively 53.6° average
Postoperatively 3.3° average
(30 cases had 0°)

3. *Insulin test (Hollander)*

Preoperatively 64.2° Free acidity.
average
Postoperatively 1.7° Free acidity.
average

4. *Complications (Principal)*

- A. Gastric distention with retention (seventeen cases)
Usually *disappears* three to twelve months postoperatively
- B. Diarrhea (Four cases; one severe, three mild)
- C. Cardiospasm (two cases; one relieved by etamon)
- D. Foul gaseous eructations (three cases)

5. *Mortality*

None

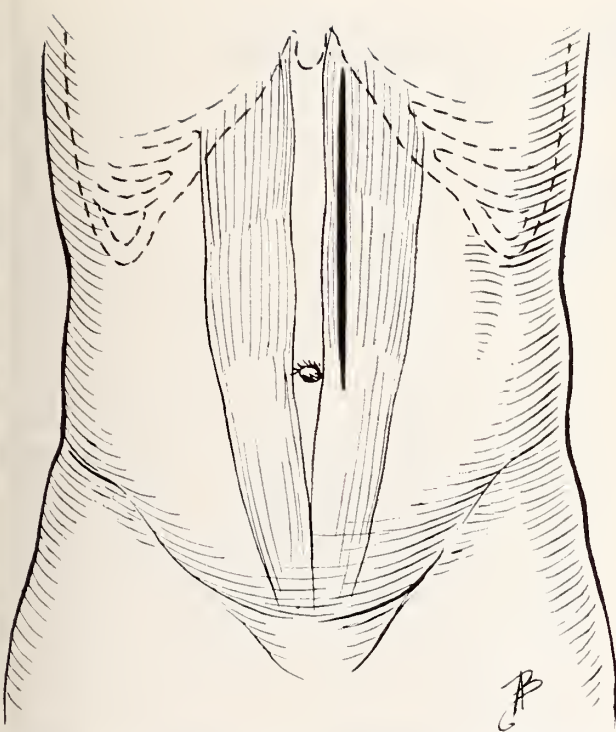


Figure 11. Transrectus or paramedian skin incision.

6. *Clinical subjective results*

Excellent	Thirty cases
Fair	Two cases
Poor	One case

DISCUSSION

Vagotomy, while a new surgical procedure in the treatment of gastro-intestinal ulceration, has a sound physiological background. Animal experimentation has been invaluable in this problem. The indications at the present time are flexible but time and experience will stabilize them; however, gastric ulcers will probably continue to be treated by other surgical methods due to the possibility of their becoming malignant. Preoperative tests should and can be run by the average surgeon so that valuable data can be accumulated and a more scientific approach to the problem attained. The transabdominal route is the one of choice in order to explore and

examine the existing pathology. This will enable the surgeon to decide whether a supplementary operation along with vagotomy is indicated and if so can combine the two rather than supplementing the emptying operation at a later date. The postoperative studies should routinely be done if possible in order to check the thoroughness of the operative procedure. Complications will diminish with experience, and the methods of handling the most distressing ones will improve with time.

CONCLUSIONS

Fifteen years hence we will probably be able to evaluate vagotomy in a just and fair appraisal. We will know whether the patient on whom we do a vagotomy only, for bleeding duodenal ulcer, will hemorrhage again. We will know whether jejunal or marginal ulcers will develop in the patients on whom we do a posterior gastro-enterostomy or partial gastrectomy in conjunction with the vagotomy. We will know whether ulcers will again form after a complete vagotomy and whether there will be regeneration of the vagi nerves if given a sufficient time. Time will tell. Vagotomy will probably be an important procedure in treating gastro-intestinal ulceration since it has a sound physiological background.

SUMMARY

1. Progress made in gastric surgery from 1881 to 1943 is cited.
2. The phases of gastric secretion are discussed.
3. Experimental work on vagotomy is reviewed.
4. The clinical applications of vagotomy are shown.
5. Relative indications for vagotomy are given.
6. The pre- and postoperative tests, preparation, and studies are discussed.
7. Operative procedures are evaluated.
8. Complications of vagotomy are given.
9. Thirty-four cases of vagotomy are reported and the results in thirty-three cases given.
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Experience With Cardiolipin

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Cardiolipin is the name given to the nitrogen-free phospholipid extracted from beef heart, and first reported by Pangborn in 1941¹. While cardiolipin has not been synthesized, it is thought to be a chemically pure substance, since repeated repurification changes neither its chemical nor antigenic properties.

Cardiolipin alone is not antigenic, and requires the addition of lecithin and cholesterol. The optimum proportions of these substances varies with the procedure to be used.

The mixture of cardiolipin, lecithin, and cholesterol in alcoholic solution is an antigen that is substituted for the standard beef heart extracts now in use. It can be used with most of the standard procedures and techniques. Because of this, the picture in regard to the serodiagnosis of syphilis has been further clouded instead of clarified, since the number of available tests has been doubled. Numerous reports published during the past few years attest to the superiority of cardiolipin antigen in almost all techniques, so that eventually a few standard procedures may be evolved with this antigen as the basis.

Since about the first of the year we have been using cardiolipin antigen adapted to the macrofloculation technique of Kahn, in parallel with the standard Kahn test. At the time of preparation of this paper we had performed 1,664 tests with cardiolipin antigen. While this number is far too small to provide accurate statistics, it has been adequate to give us experience in the use of the antigen for routine work in a private hospital. It is evident to us that, in addition to the important advantages of increased sensitivity and specificity, this antigen has certain other advantages that make the performance of the tests easier and faster, and renders the reading of the results more precise.

Since the purpose of any test for syphilis is to establish the presence or absence of the disease, the perfect antigen would give a positive result in every infected case, and a negative result in every case not infected with the *Treponema pallidum*. Cardiolipin is not the perfect antigen, since false positive and false negative reactions still occur. However, the reduced incidence of such misleading results is attested by every paper published on the subject. It is not our purpose to review the literature at length, but reference to a few of the more recent articles will be made to emphasize the greater sensitivity and specificity of this new antigen employed by various techniques.

SPECIFICITY

The decreased incidence of falsely positive and falsely doubtful reactions obtained with the use of cardiolipin antigens will be apparent from the following reported series and from our own statistics.

Levine, Kline, and Suessenguth² report Kline diagnostic and Kline exclusion tests and tests with cardiolipin antigen, using a microfloculation method, on 24,511 non-syphilitic sera. Their results are summarized in Table I.

The results obtained by Giordano, Culbertson, and Higgenbotham³ comparing the cardiolipin microfloculation test originated by the Venereal Disease Research Laboratory with the standard Mazzini test on 24,085 unselected sera are summarized in part in Table II.

Andujar, Anderson, and Mazurek⁴ tested the serum from 180 patients who had obtained false positive reactions with one or more standard antigens, using the Kline Exclusion test with regular antigen and cardiolipin antigen, the Kline Diagnostic test with regular and with cardiolipin antigen, the Kolmer Quantitative test with regular and cardiolipin antigen, and the standard Kahn test with regular antigen —

Read before Section on Pathology at Illinois State Medical Society, Chicago, May 11, 1948.

TABLE I

False Reactions in 24,511 Non-syphilitic Sera
(Lévine, Kline, and Suessenguth)

	Cardiolipin		Kline Diag.		Kline Exclusion	
	No.	%	No.	%	No.	%
False Positive	7	.028%	67	.27%	231	.93%
False Doubtful	49	.2 %	147	.59%	281	1.13%
Per cent in Error		.228%		.86%		2.06%

TABLE II

False Positive and Doubtful Reactions on 24,085
Unselected Sera.
(Giordano, Culbertson, and Higgenbotham)

	V.D.R.L. Cardiolipin		Mazzini	
	No.	%	No.	%
False Positive	8	.03%	13	.05 %
False Doubtful	31	.12%	11	.045%
Total Error	39	.15%	24	.095%

seven tests in all. Their cases included infectious monocyctosis, aeute upper respiratory infeetions, malaria, pregnaney, and six other conditions commonly giving false reactions. Their results are summarized in Table III.

They conclude that cardiolipin antigen is definitely more specific, i.e., fewer false positives, in eases of malaria, but that the improvement in other conditions is not so marked. It will be noted that, with each technique, the tests done with cardiolipin antigen gave from 4% to 14% greater accuraey than the corresponding test using regular antigen.

To date we have tested 1,623 non-syphilitic sera using the standard Kahn, and the Cardi-

olipin Kahn. Our results are summarized in Table IV.

One ease in this series is of particular interest.

A. H., a 54 year old salesman was admitted to the hospital with a diagnosis of bronchitis of six weeks' duration. During his hospital stay we obtained two positive standard Kahns, and one positive standard Kolmer. The Kahn tests done with cardiolipin antigen were consistently negative. Spinal Fluid Wasserman was negative as was the colloidal gold. The patient gave a history of a negative Wasserman test 11 years ago and denied infection. Physical examination failed to reveal any of the stigmata of syphilis. A third standard Kahn, taken 12 days after the first test and 9 days after the second, showed a drop from three plus positive to two plus doubtful. The cardiolipin test was still negative.

The patient was followed without treatment. One month after the first test the standard Kahn, the cardiolipin Kahn, and the Kolmer were all negative. We believe this represents a ease of false positive reactions with regular antigens, although there is one disturbing element that, perhaps, should exclude this ease from the category of proven non-syphilities. As treatment

TABLE III

Percentage Results with 180 Sera of False Reacting Non-syphilitics.
(Andujar, Anderson, and Mazurek)

Result	Kline Exclusion		Kline Diagnostic		Kahn Reg.	Kolmer	
	Reg.	Cardio.	Reg.	Cardio.		Reg.	Cardio.
Negative	66.48%	70.56%	70.56%	77.78%	68.89%	64.45%	78.33%
Doubtful	12.29%	10.56%	15.56%	8.45%	15.00%	16.11%	10.00%
Positive	21.23%	18.88%	13.88%	13.77%	16.11%	19.44%	11.67%
% Error	33.52%	29.44%	29.44%	22.22%	31.11%	35.55%	21.67%

TABLE IV

Tests on 1,623 Non-syphilitic Sera				
Results	Cardiolipin Kahn		Standard Kahn	
	No.	%	No.	%
Negative	1,618	99.69%	1,615	99.51%
Doubtful	5	.31%	6	.37%
Positive	0		2	.12%
Total Error	5	.31%	8	.49%

for his bronchitis, the patient received 1.6 million units of penicillin.

SENSITIVITY

The decreased incidence of falsely negative reactions with cardiolipin antigens is even more striking than the decreased incidence of false positives. This is particularly evident in old, treated cases who have become seronegative by ordinary tests.

Levine, Kline, and Suessenguth² report the results of Kline diagnostic tests with regular antigen, and similar tests using cardiolipin antigen performed on 2,246 sera of known luetics. The results are summarized in Table V.

It will be noted that the standard Kline was falsely negative in 519 cases, a percentage of 23.1; the cardiolipin was falsely negative in 1 case, a percentage of .04.

Further results of Mazzini and V.D.R.L. (cardiolipin antigen) tests in the series of 24,085 unselected sera reported by Giordano, Culbertson, and Higgenbotham³ are summarized in Table VI.

The series of cases reported by Andujar, Anderson, and Mazurek⁴ include 3,761 known luetics classified as secondary, latent, tertiary, and congenital. The results with the various tests used are summarized in Table VII. No mention is made of treatment status.

TABLE V

Comparison of Regular Kline Diagnostic and Cardiolipin Tests on 2,246 Syphilitic Sera. (Levine, Kline, and Suessenguth)

Results	No. Cases	%	Comment
Both ++ to ++++	1,240	55.2%	Complete agreement
Both ± to +	26	1.2%	56.4%
Cardio. ++ to ++++			
Kline ± to +	460	20.4%	Incomplete agreement
Cardio ± to +			31.5%
Kline —	249	11.1%	
Cardio. ++ to ++++			
Kline —	270	12.0%	
Cardio. —			Complete disagreement
Kline ++ to ++++	1	.04%	12.1%
Cardio. —			
Kline ± to +	0	0	

TABLE VI

False Negatives in 24,085 Tests on Unselected Sera. (Giordano, Culbertson, and Higgenbotham)

	V.D.R.L. Cardiolipin		Mazzini	
	No.	%	No.	%
False Negatives	13	.054	187	.777

Comparison of the percentage of error in each pair of tests demonstrates the superiority of cardiolipin antigens.

In our own small series of known luetics, tested with the standard Kahn, and the cardiolipin Kahn, the greater sensitivity of the cardiolipin antigen is again apparent. Our results are summarized in Table VIII.

Our series includes 12 standard Kahns and 11 cardiolipin Kahns on 8 patients for whom no definite diagnosis has been established. Of

TABLE VII

Percentage Results with 3,761 Sera of Known Luetics. (Andujar, Anderson, and Mazurek)

Result	Kline Reg.	Exclusion Cardio.	Kline Reg.	Diagnostic Cardio.	Kahn Reg.	Kolmer Reg.	Cardio.
Negative	7.5%	4.9%	10.6%	6.9%	16.5%	9.6%	5.0%
Doubtful	7.7%	10.5%	8.3%	4.6%	6.2%	2.3%	2.7%
Positive	84.8%	84.6%	81.1%	88.5%	77.3%	88.1%	92.3%
% Error	7.5%	4.9%	10.6%	6.9%	16.5%	9.6%	5.0%

TABLE VIII

Results of Tests on 31 Sera of Known Syphilitics.				
Results	Cardiolipin Kahn		Standard Kahn	
	No.	%	No.	%
Negative	1	3.3%	4	12.9%
Doubtful	8	26.7%	8	25.8%
Positive	21	70.0%	19	61.3%
Total	30	100.0%	31	100.0%

the 12 standard Kahns, one was positive, ten were doubtful, and one was negative. Of the 11 cardiolipin Kahns, 7 were positive, and 4 doubtful. We feel fairly certain that at least one, and possibly more, false positive Cardiolipin Kahns are included in this group.

REPRODUCIBILITY

Giordano, Culbertson, and Higgenbotham³ state that results of comparative tests using different lots of cardiolipin antigen show that their reactivity can be consistently reproduced and that variations between different lots of antigen are of such slight degree that these mixtures will lend themselves to standardization much better than lipoidal substances.

They conclude that cardiolipin-lecithin-cholesterol antigen exhibited consistently reproducible levels of specificity and sensitivity.

This is to be expected as a result of the chemical purity of the substances composing the antigen.

We have, to date, used two lots of cardiolipin antigen and have been unable to detect any difference in reactivity between the two.

CLARITY

In addition to the tendency of cardiolipin antigens to give a slightly sharper distinction between positive and negative tests, i.e., fewer doubtful reactions, the physical characteristics of the cardiolipin antigen emulsions used in the Kahn macroflocculation technique is such that the results are easier to read. This is due to the fact that the final dilution of the cardiolipin antigen emulsion with negative serum and saline is only faintly opalescent as compared to the somewhat cloudy appearance of the negative standard Kahn. Thus the flocculation in a weekly positive test is readily discernible in the practically clear fluid.

STABILITY

The solutions of cardiolipin, lecithin, and cholesterol, separately keep for years. Andujar, Anderson, and Mazurek⁴ state that "storage of the mixed cardiolipin, lecithin in dark glass bottles, for many weeks did not appear to affect its qualities seriously."

Our mixture of cardiolipin, lecithin, and cholesterol in alcoholic solution was kept in a dark glass bottle at room temperature for two and one-half months without apparent deterioration.

While stability of the stock solution is of great practical value, the advantages of cardiolipin antigen over the standard antigens is more apparent in the stability of the antigen emulsions. Andujar, Anderson, and Mazurek⁴ state, "In the emulsion form the cardiolipin-lecithin-cholesterol mixture was useable even after one week in the refrigerator, whereas ordinary Kline emulsions deteriorate in a matter of hours, or days." and "—one emulsion kept in the refrigerator for more than 6 months, was still quite antigenic."

One of the drawbacks of the standard Kahn test is the fact that the standard emulsion is useable for only 20 minutes. If several small groups of tests are to be run on the same day it is necessary to make up a fresh batch of antigen emulsion for each run. Since at least 1 c.c. of antigen solution must be used each time, this results in considerable waste of material. In our hands, emulsions of the cardiolipin antigen kept at room temperatures for as long as five hours gave results that were identical with those obtained with freshly made emulsion, so that it is now our practice to use the cardiolipin antigen emulsion throughout the working day. We have not tried keeping emulsions longer than 5 hours.

TECHNIQUE

In our series we are using the cardiolipin, lecithin, cholesterol ratios recommended by Brown⁵, that is, cardiolipin .03%, lecithin .75%, and cholesterol .25%, with the addition of .2% gum mastic as recommended by Kahn, et al⁶. Any chemically pure cholesterol is satisfactory, but the lecithin must be especially prepared for this purpose, and is available in 1% solution in absolute alcohol from the Lederle Laboratories, Division of the American Cyanamid Company. The cardiolipin in 0.2% alcoholic solution is available from the same source.

Tests of dispersion titre with 0.9% saline were optimal at 1:1, and we have used this ratio throughout. We have omitted the heating of the antigen emulsion that Kahn⁶ recommends, and have been fully satisfied with the sensitivity of the antigen. We routinely have allowed the emulsion to ripen for ten minutes prior to use. The actual technique of the test is exactly the same as for the standard Kahn test.

We routinely do a single tube screening test on all hospital admissions. For this purpose we use the tube containing .0125 c.c. of antigen suspension. Any serum showing reaction in this tube is then tested with the usual three tube technique.

COST

At present prices for the stock solution, it costs approximately \$65.50 to make up 100 c.c. of the cardiolipin-lecithin-cholesterol antigen. Used with maximum efficiency, this means a cost of about three cents for the antigen for each three tube test. Used with maximum efficiency, the cost per one tube test is less than one-half cent. Since, usually, some of the antigen emulsion will be wasted, the actual cost will be somewhat higher. In our laboratory, doing both one and three tube tests, the cost of antigen has averaged 2.6 cents per test, certainly not an excessive amount in view of the many advantages cardiolipin offers.

DISCUSSION

Cardiolipin, combined with lecithin and cholesterol in optimum proportions, constitutes an antigen for the serodiagnosis of syphilis, which has been shown by numerous investigators to be superior in specificity and sensitivity to the standard lipoidal antigens now in use. In addition, this antigen is more uniform in its properties from lot to lot, yielding consistently reproducible results, is more stable, especially in the emulsion, and produces suspensions that are read more easily. The cost of the antigen, per test, is modest.

From the work done so far it appears that results obtained with most of the standard techniques can be improved both in sensitivity and specificity by substituting cardiolipin-lecithin-cholesterol antigen for the present standard antigens. It would, therefore, seem to be time for the next step, advocated by Kline⁷ and others, of evaluating cardiolipin antigen used according to various techniques with the idea of selecting

one, two, or possibly three tests to be the standard diagnostic tests for syphilis, and to replace the present confusing multiplicity of serodiagnostic methods.

SUMMARY AND CONCLUSIONS

Cardiolipin, lecithin and cholesterol in optimal proportions constitute an antigen for the serodiagnosis of syphilis yielding results that are more specific, more sensitive, more uniform, and, in some tests, more easily read than those obtained with standard antigens. In addition, the antigen emulsions used in flocculation tests are more stable than those employing regular antigens.

Cardiolipin is not the perfect antigen, since false positive and false negative reactions still occur. However, because of the demonstrated superiority of cardiolipin antigen, we feel that it should replace the standard antigens now in use, and that eventually two or three methods for its employment should be selected and standardized.

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DISCUSSION

DR. ISADORE PILOT, Chicago: When cardiolipin was first introduced, Dr. Kline had an exhibit at the American Medical Association and was very enthusiastic about it. It was thought by him and by the Consultant in Serology for the Army that this was the answer. It was the impression that cardiolipin gave few false positive reactions. Now it is known that cardio-lipin is a pure and more sensitive antigen and has reduced the incidence of false positive and false negative reactions, but it is not the perfect answer. I do not believe we will ever have a perfect antigen in the serologic diagnosis for syphilis because the antigens are non-specific and we are testing for alterations which are not peculiar to syphilis. There are some diseases that are remarkably uniform in giving the false positive reaction. One is leprosy and another is yaws. In these diseases has cardio-lipin been helpful in differentiating the reaction from syphilis?

DR. DENNIS B. DORSEY, Chicago (in closing): I have had no personal experience with any of the diseases such as leprosy or yaws. All I can say is what

I have found in the literature. There have been no extensive series of tests in these conditions. However, in the few tests that have been run cardio-lipin is not

a great deal better than the standard tests, at least not enough better to be of any great significance.

X-Ray Therapy of Inflammatory Lesions of the Eyelids

**Edward C. Albers, M.D., and
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In the present era of antibiotics, the discussion of a proved therapeutic procedure, known for many years, for the treatment of infectious inflammatory conditions may seem unnecessary. Yet, as we learn to use antibiotics with increased caution and discretion, we feel that it is wise to review proved procedures and to give them their deserved place in modern therapy. Such a review is indicated especially with regard to radiation therapy of glandular infections of the eyelids.

The beneficial effect of roentgen rays on inflammatory processes has been known as long as such rays have been used for therapeutic purposes. In 1924, Heidenhain and Fried^{1, 2} were the first to clarify the essential technical details in the roentgen therapy of acute inflammatory conditions. In this country, Desjardins, Hodges, Osgood, and others^{3, 4, 5, 6} have studied the subject and confirmed the observations of Heidenhain and Fried.

The exact physiological mechanism of how roentgen radiation produces a beneficial effect on infectious inflammatory processes is still in doubt. Experiments have shown that the rays do not directly kill the causative organism. It has been proved that the number of r necessary to do so would damage the surrounding tissue

irreparably. Desjardins, Osgood and others considered the sensitivity of the leukocytes to roentgen rays as the most important factor. When the pus cells break down under the influence of roentgen radiation, cell-bound antibodies are set free to support the normal defense mechanism of the inflamed tissue. In addition, it is believed that a diminution of pressure and an increased blood flow within the inflamed area takes place and that the permeability of the capillaries and the osmotic changes are advantageously altered.

Whether or not specific antibodies play an essential part appears questionable, even though Pfalz⁷, in animal experiments, demonstrated an increase of Wright's opsonic index. Among our own patients with multiple lesions, we were unable to notice an improvement of the untreated lesion after other infectious foci were irradiated.

The importance of the radio-sensitivity of the leukocytes should not be overestimated. Small doses of roentgen rays, probably too small to destroy even these sensitive cells, will give good clinical results. Large doses, even though one would expect more destruction of leukocytes, do not produce such beneficial results, but often make the inflammation worse. Desjardins explained this paradoxical effect of large doses by a "reactive inflammation" superimposed on the original process. Dyes⁸ thought that an excessive destruction of leukocytes overloads the area with albumen (leucines) and thus produces a damaging acidosis. Against these explanations, however, stands the fact that even after choice

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Presented before the Section on Eye, Ear, Nose and Throat, 108th annual meeting, Illinois State Medical Society, Chicago, May 10-12, 1948.

of the optimal dosage, an initial short exacerbation of the inflammatory reaction is commonly observed.

Pendergrass and Hodes⁹ emphasized the importance of the capillary reaction following x-radiation and its consequences in regard to osmosis and chemical reaction within the inflamed field. Their theory is easily coordinated with the modern conception of inflammation and is supported by such laboratory studies as the findings of an increase of calcium in histological sections of tissue exposed to small doses of x-rays (Meltzer and Kuentz¹⁰).

Among x-ray therapists general agreement does exist that the technique for treating acute and chronic inflammations is not the same. Since the essential pathological picture of inflammations of the glandular structure of the eyelids does not differ essentially from pyogenic lesions of other glands, the technique of roentgenological therapy should be fundamentally the same in both cases.

Acute lesions should be treated as early as possible. Best results are obtained before tissue destruction or suppuration has taken place. Small doses within the range of 10 to 20 per cent of an erythema dose give optimal results. The field of irradiation should include the entire lesion plus an area of apparently normal surrounding tissue. The more virulent the reaction, the more extensive the edema, and the larger the field, the smaller the dose of x-rays should be. Since all lesions here discussed are close to the skin surface, a relatively soft radiation supplied by a dermatological therapy unit is adequate. If an early infection is treated under optimal conditions before an abscess is formed, complete regression may take place within a few days. Often an exacerbation lasting only several hours can be observed during the first day after irradiation. If the necrobiotic process has advanced so far that it has become irreversible before therapy is instituted, suppuration can no longer be avoided by irradiation therapy, but inflammatory infiltration will become localized by x-ray therapy, and the formation of the abscess will be hastened. In cases where surgical interference becomes necessary, after radiation therapy, the incision can be limited to a small puncture and the resultant scar will be smaller than could be expected after other forms of therapy. In experienced hands, most cases require only one x-ray treat-

ment. If the desired result is not obtained in twenty-four to forty-eight hours, the treatment may be repeated. If the maturation of the abscess is fully completed before the patient consults the doctor, irradiation will be of little benefit, and it is better not to use it at all. After the pus has been evacuated, x-ray therapy might hasten the resorption of the remaining infiltrate.

In subacute and chronic infections, where suppuration plays a minor part if it occurs at all, the roentgenological treatment plan is slightly different. The choice of the field and the quality of the roentgen rays is the same as in the treatment of acute conditions, but in the selection of the quantity of the rays and the treatment intervals, different principles must be applied. Here the individual dose may vary from 25 to 35 per cent of the erythema dose, and this amount may be repeated at intervals of five to ten days until a full erythema dose (about 400 r) has been administered. Clinically evident suppuration usually does not occur, and the absorption of the inflammatory infiltration is slow. Here, too, initial exacerbation, noticeable by increased swelling and tenderness of the lesion for a short time, may occasionally follow the administration of the roentgen rays.

The inexperienced therapist should remember that it is better to give the patient too small rather than too large a dose. Also, one should always consider roentgen therapy a supportive form of treatment. It must not necessarily exclude other well-proved methods of therapy.

The dosimetric problems are simpler than the inexperienced would expect. So far in this discussion the roentgen therapeutic dose has been expressed in percentage of an erythema dose, which is the amount of radiation needed to produce a faint erythema of the skin in the majority of cases. This dose, when stated in r units, varies with the quality of the radiation chosen and with the size of the field. The most convenient apparatus for ophthalmological therapy is a machine operating with 35 to 100 K V and commonly used in dermatological practice. Treating a small field with such a unit and using unfiltered radiation (inherent value of tube equals 0.6 mm. Al), we obtained a threshold erythema with about 400 r. Ten to 20 per cent of the erythema dose, as recommended for acute inflammation equals a dose of about 40 to 80 r. For chronic cases, 100 to 130 r for each

FIGURE 1. — ACUTE INFLAMMATORY PROCESSES

Diagnosis	Number of cases (137)	Duration of lesion at time of first treatment	Average number of treatments	r per treatment	Cures without suppuration or surgical interference	Suppuration or surgical interference
Acute hordeolum internum without suppuration	89	3.3 days	1.5	60	75 (85%)	14 (15%)
Hordeolum internum with suppuration or question- able suppuration	24	5.2 days	1.8	60	14 (59%)	10 (41%)
Hordeolum externum without apparent suppuration	10	2.4 days	1.2	53	6 (60%)	4 (40%)
Cellulitis of eyelid	14	3 days	1.5	60	7 (50%)	7 (50%)

treatment should be the adequate amount, and for subacute lesions, 70 to 100 r.

When applying the roentgen therapeutic experience discussed so far in the treatment of acute inflammatory conditions of the eyelids, one finds that various clinical types of inflammation respond quite differently to the treatment. This difference of reaction depends on the topographical anatomical position of the three important palpebral glands. In the shallow glands of Zeis and Moll situated in the loose elastic tissue of the lid margin, the inflammatory reaction is more superficial, the symptoms are more mild, the disability is less great, and the recovery is more rapid than in the meibomian glands. It must be remembered that meibomian glands are composed of long central ducts with surrounding acini and are almost wholly situated in the dense cartilaginous tissue of the tarsus. The reaction to infection, therefore, is much more violent and of much longer duration and leads in many cases to the formation of chalazia which may last for months and even years.

The fundamental idea in the conventional treatment of palpebral infections is to wait for maturation of the abscess supported by the application of hot packs, and then to institute drainage. When abscess formation does not take place and when, in the case of the meibomian glands, a chalazion develops, the therapeutic problem is solved by radical surgical intervention. The result is always a permanent scar in the tarsus and the destruction of the involved gland. Patients, therefore, suffer much incon-

venience, not only because of the long-drawn-out process but also from the unsightly appearance of the lesion. The latter point is of great importance to the self-conscious patient.

In our cases, the response of palpebral infections to roentgen therapy was far different from the response to the usual type of treatment. When roentgen therapy was given early, before destruction of tissue had taken place, a rapid involution without abscess formation often resulted. After a slight temporary increase in symptoms, especially pain and edema, which started a few hours after therapy was instituted and lasted for four to five hours, the inflammatory symptoms rapidly subsided, so that the lesion could hardly be noticed by the patient in 24 hours; pain and edema, the most troublesome symptoms, subsided rapidly, so that there was no discomfort to the patient in eight or ten hours.

Many of the infections involuted after the first treatment, but if the symptoms did not subside, a second treatment twenty-four to forty-eight hours later often produced the desired result. Usually there was no reaction after the second treatment, and both the first and the second treatments caused very little inconvenience to the patient. In many cases swollen and tender pre-auricular glands were no longer tender after ten to twelve hours, and the swelling had usually subsided after forty-eight hours.

Where the necrobiotic process was more advanced, even though suppuration was not noticeable, an abscess developed. This group

FIGURE 2. — MEIBOMIANITIS

Number of cases — 20
Duration of lesion — 1 mo. to 2 yr.
Symptoms — redness, crusting of lid margins, pus in eyes
Prevailing organism in culture — <i>Staphylococcus aureus</i> and <i>albus</i> which fermented mannite
Total r given — 185
Average number of treatments — 2
Complete cures — 12
Improved — 4
No improvement — 4

of patients, too, reported that they were free from pain after twenty-four hours, and it was quite apparent at this time that the whole suppurative process was localized and hastened markedly by roentgen therapy. Also, infiltrations seemed to be more rapidly absorbed after evacuation of the abscess. In several cases where fluctuation developed after roentgen therapy, incision did not yield anything but a walled-off cavity filled with bloody fluid.

In chronic meibomianitis where much purulent fluid could be expressed from the glands, where the lid margins were red, and where the conjunctiva of the lower cul-de-sac was irritated, roentgen therapy produced a quick cure in many cases where the conventional forms of therapy had failed.

The technique of irradiation is very simple. The conjunctiva and globe are anesthetized with $\frac{1}{2}$ per cent pontocaine and a cup-shaped lead shield, well lubricated with boric acid ointment, is inserted under the eyelids. The treatment cone, 3 to 5 cm. in diameter, of a modern shock- and ray-proof treatment unit is brought close to the area to be treated. The physical data of the apparatus used in our cases are as follows: 55 K V, 5 ma., Target Skin Distance 20, 80 r per minute output unfiltered radiation, inherent filter value of tube about 0.6 mm. of Al. After the irradiation, the shield is removed and the conjunctival sac is thoroughly irrigated with warm boric acid solution.

In the past, the fear of the intolerance of the globe to x-rays has probably been an important reason why roentgen therapy of inflammatory lesions of the eyelids has not received the attention it deserves. Since the eyeball is well pro-

tected by a cup-shaped lead shield, very few of the roentgen rays reach the globe during treatment of the eyelids. The roentgen therapist, therefore, should not fear that the eyeball is being injured during treatment.

One might ask why roentgen therapy should be used at all when such wonderful results in the treatment of pyogenic infections have been obtained with penicillin. This drug, at first enthusiastically received, has not been a cure-all, and the present tendency to avoid the routine use of penicillin is noteworthy. Because of the danger of producing an allergy, penicillin should be reserved for use in the more life-endangering diseases. Then, too, penicillin, even in the newer forms, must be given for from five to seven days. This necessitates daily visits to the doctor's office and is time-consuming and expensive. On the other hand, in roentgen therapy usually only one or two visits are necessary. X-ray therapy, therefore, is regaining the importance it deserves.

CONCLUSIONS

1. Roentgen therapy is a valuable aid in the treatment of infectious inflammatory conditions of the eyelids.

2. Roentgen therapy does not compete with traditional treatment methods but should be intelligently used in combination with them.

3. Roentgen therapy when used with proper technique does not endanger the globe.

4. Roentgen therapy is preferable to penicillin therapy.

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DISCUSSION

Dr. William F. Hughes, Jr. (Chicago): Doctors Albers and Buley have presented some very interesting and significant results in the application of x-ray therapy to inflammatory conditions of the eyelids. Their success can be partly attributed to a strict adherence to three main principles of x-ray therapy of inflammatory lesions elsewhere in the body: (1) The use of small doses; (2) employment of soft x-ray of low voltage, and (3) treatment during the early infiltrative stage of the inflammation. The importance of early treatment is clearly shown by their results, in which the incidence of surgical intervention or suppuration in acute chalazions was reduced by early treatment, in contrast to those showing evidence of suppuration. The treatment as they have described it seems to have no undesirable effects; the globe is adequately protected by a 3 mm piece of lead placed behind the lids, and no mention is made of any exacerbation of the lesions or loss of cilia.

The question naturally arises in the minds of ophthalmologists who do not have ready access to such x-ray therapy as to which cases cannot be handled satisfactorily by ordinary office procedures and should be referred to the roentgenologist for therapy. As Drs. Albers and Buley imply by the relatively small number of styes they have treated by x-ray, it is doubtful if an acute sty is worthy of x-ray therapy, even though the number subsiding without suppuration may be slightly reduced. Suppuration or incision with drainage of a sty does not damage the lid significantly. There is no evidence that x-ray treatment will prevent recurrence of styes. Such recurrences would probably have to be prevented by a combination of medical treatment such as massage, application of antibiotics, and possibly immunological procedures such as staphylococcus toxoid and vaccine.

On the other hand, it is probably desirable to avoid if possible surgical intervention or suppuration in chalazion. In addition to producing deformity of the tarsus, curettage may damage adjacent Meibomian

ducts, leading to the formation of secondary chalazions. Also, the use of antibiotics is usually fruitless. Accordingly, x-ray therapy of early acute chalazions may be the method of choice.

The authors do not elaborate in their text the types of cellulitis of the lids which they treated with x-ray; e.g., the source of the infection, the extent, and the infective organism. It may be that extensive cellulitis of the lid, perhaps extending deep within the tissues and caused by an organism sensitive to antibiotics, might better be treated medically.

The management of chronic Meibomianitis or blepharitis is always difficult, and the authors' results with x-ray therapy are encouraging. It would be interesting to know the characteristics of the four cases which failed to respond to x-ray therapy; whether they were more chronic, or whether they were predominately seborrheic or staphylococcal in type.

I would like to ask one question: Would the use of slightly more penetrating x-rays, e.g., 100-200 KV instead of 55 KV be more effective, especially in deep-seated infections within the tarsus?

I want to thank the authors for the privilege of discussing this stimulating paper and bringing to the attention of ophthalmologists a valuable addition to treatment of inflammatory conditions of the lids.

Dr. Edward C. Albers: The apparent reason for poor results in the treatment of Hordeoli was that the patients did not come to the office until the maturation of the abscess was almost complete or until the abscess had actually ruptured. The patients usually tried home remedies before consulting the doctor. The apparent failure in the treatment of Meibomianitis was probably due to the fact that the patients did not return for sufficient treatment.

As to whether more penetrating therapy might be indicated — the effective component of high voltage therapy is no different from that of low voltage therapy. Both penetrate the eyelids, but a greater portion of X-ray energy is absorbed when soft radiation is used.

Pulmonary tuberculosis in the old is usually of insidious onset and may be completely masked by other disabilities, or often ignored until either an intercurrent illness or a sudden increase in activity of the tuberculosis leads to an illness which may, even at this stage, be treated as nothing out of the ordinary in an aged person. In such cases pulmonary changes may be gross before tuberculosis is diagnosed. F. J. Hebbert, M.D., *The Lancet*, Aug. 14, 1948.

One thing should be strongly emphasized. Streptomycin is not an overnight cure-all for tuberculosis. Like other valuable drugs, such as penicillin and sulfonamides, it has its assets, limitations and liabilities. It must not be considered as a substitute for sanatorium care, rest in bed and other well established methods of treatment, such as collapse therapy and other surgical procedures. Karl H. Pfuete, M.D., *Dis. of Chest*, Sept.-Oct., 1948.

Regional Ileitis and Neurosis

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The diagnostic ability and acumen of a physician is frequently taxed in establishing a diagnosis. He must determine the disease process, differentiating between a functional and an organic condition. Classification of a patient as a psychoneurotic should be made with great caution, and then, only, after completion of a very careful examination, study and workup. Some question the advisability of extensive examinations, feeling these procedures may tend to fix in the mind of the neurotic the belief that his troubles are organic. On the other hand, the physician must first determine whether or not organic pathology exists, and secondly, the psychoneurotic can develop physical illnesses such as appendicitis, peptic ulcer, or gall bladder disease.

A history of tiredness, general fatigue, chronic constipation and vague abdominal complaints for many years, together with repeated negative workups at several recognized clinics, would suggest psychoneurosis. A case is presented to emphasize the above mentioned factors.

Case Report: C. O. J., 40 year old, single, white male, gave a history of severe attack of scarlet fever during childhood, associated with a coma of several weeks duration. This was followed by a partial deafness. Development and schooling was normal until first year of college, when, due to his partial deafness, he could not meet curricular requirements. First complaints of constipation occurred at age of 20 and gradually became more marked. His work record was poor and he complained of fatigue and insomnia. He was examined by several doctors and by three large midwestern clinics, and considered a neurotic. In 1943 he was admitted to the Elgin State Hospital. His examination revealed an otitis media and neurological

findings of rigidity of posture, mask-like facies and some limitation of swing of his arms. Laboratory tests were negative. He was diagnosed Psychoneurosis with possible post-encephalitis, Parkinsonism. Patient improved and was discharged after four months.

He worked irregularly. He lost initiative, became fatigued, depressed and continued to have abdominal complaints and constipation. In 1947, at the age of 39, he volunteered for readmission to the Elgin State Hospital. He stated "my nerves are all shot, bad constipation, can't sleep, can't work, nervous exhaustion." Physical and laboratory tests were negative and he was diagnosed "Without Psychosis, Parkinsonism."

During the latter part of December 1947 patient was given a history of chronic constipation of 20 years duration, a loss of 15 pounds in the last six months, sent to the acute hospital service of the institution. He occasional vomiting, and diffuse abdominal pains. Examination revealed moderate abdominal distension with active peristalsis, but no localizing tenderness. R. B. C. was 2,850,000 with Hb. of 9.5 and W.B.C. of 9,200; (a blood count two weeks previously was normal). Flat plate of abdomen showed marked gaseous distension. He was treated for an incomplete obstruction. Patient improved, was prepared for surgery and operated upon January 2, 1948. There was an obstruction of the mid-ileum, with marked edema, thickening and old, firm adhesions between loops of constricted bowel. The lumen was markedly reduced and in several areas would barely permit the passage of a pencil. The changes were restricted to the mid-ileum. Twenty-four inches of ileum was resected with a side-to-side anastomosis and an ileostomy. The post-operative course was uneventful. Patient was out of bed on the second day post-operative, and the ileostomy tube came out on the 10th day. The pathologist found a non-specific inflammatory process, and diagnosed the specimen regional ileitis.

Since the operation the patient has had no abdominal complaints, no constipation, and he has gained 39 pounds in three months. He was discharged from the Elgin State Hospital. He is improved mentally, but still in need of considerable psychotherapy. He has had symptomatology for years, with resultant incapacity, and in addition he has had an encephalitis.

This case emphasizes the need of caution in making the diagnosis of psychoneurosis. This patient was considered a psychoneurotic because of symptomatology of a chronic illness, with

Presented before the Physicians' Association, Department of Public Welfare Section of the 108th Annual Meeting of Illinois State Medical Society, May 12, 1948.

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Resected section of mid-ileum, showing regional ileitis. A. Proximal dilated loop measuring 10 cm. in diameter; B. showing cicatrizing stenosis; C. distal loop ileum measuring 3.5 cm.

repeated negative findings by doctors and clinics, yet, after development of a subacute obstruction, a chronic inflammatory cicatrizing organic disease of the ileum was found at surgery.

The symptomatology and pathology of regional ileitis or segmental enteritis depends on the stage of the disease process. Crohn¹ in his original monograph on the subject published in 1932, described four phases of this disease:

1. *The acute phase* resembling acute appendicitis but slower in onset. Many of these patients are operated upon for appendicitis and at surgery there are findings of a blotchy, thickened, reddened terminal ileum, with clear abdominal fluid and peri-appendicitis.

2. *Symptoms of ulcerative enteritis* with slight fever, loose stools, periumbilical pain, anemia and weight loss.

3. *Stage of fibrosis and stenosis* with symptoms of incomplete obstruction. A mass is frequently palpable. (The case described above would fit into this grouping.)

4. *Stage of persistent fistulae* developing spontaneously or following surgery, especially after appendectomy. These fistulae may communicate with other loops of bowel, frequently the sigmoid, or may gradually perforate through the wall of the abdomen.

Roentgenological examinations establish the diagnosis. Fluoroscopic examinations and films should be made at frequent intervals, such as the 3, 4, 6 and 10th hours, to visualize the small bowel. Depending on the degree of involvement

there may be dilatation followed by a very marked narrowing, the Kantor "string sign". The pathology may not be continuous and there may be segments of dilatation and constriction with areas of normal bowel interspersed "skip areas" and "areas of puddling" or "pocketing." Usually the terminal ileum is involved, but areas may extend proximally; the upper ileum or the jejunum may be involved.

Treatment during the acute stage varies with different authors. Many suggest that the abdomen be opened and closed without removal of the appendix, because of the danger of development of fistulae. Others suggest the appendix be removed so that there will not be the consideration of appendicitis if, at a later date, symptomatology due to the enteritis increases. They claim fistulae develop from the ileum and not the appendiceal stump. In chronic obstructive regional ileitis, Garlock² and Crohn³ and others recommend transection of the healthy bowel proximal to the lesion, with anastomosis of the proximal end to the colon. The distal diseased end is not removed, but is closed and left in situ (the exclusion operation). It has been noted that this is frequently followed by a remission and relief of symptoms. Others, including Fallis⁴, recommend anastomosis with complete resection of the inflamed loops of bowel. In the case of fistulae, no attempt is made at dissection of the walled off tracts, an ileocolostomy with exclusion of the diseased loop is performed.

The etiology of regional ileitis or segmental enteritis is unknown. There is a tendency to favor a bacterial or virus origin. Tuberculosis has been ruled out.

It is accepted that the psychogenic element plays an important role in the etiology of peptic ulcer and ulcerative colitis. It may be an important element in segmental enteritis. Emotional factors can produce disturbances of the autonomic nervous system, which in turn may produce neuro-muscular, circulatory and secretory disturbances of the bowel. Hyman⁵, in his excellent discussion of neurogenic and psychosomatic disorders, states that regional ileitis may occur as a result of intestinal neurosis. The functional disturbances may progress to somatization, or the actual production of organic abnormality. Pavlov, Cannon and others have convincingly demonstrated in the laboratory the

effects of rage, fear, etc., upon the blood pressure, carbohydrate metabolism, and the gastro-intestinal tract. Emotional disturbances producing anxiety and muscular spasm were described by West⁶, who feels that it is probable that repeated muscular spasms may produce mucosal changes in an organ already rendered susceptible by either physical or psychological sensitization. Lewis⁷ and Portis⁸ emphasize the susceptibility of the bowel to emotional influences, with resultant alteration in tonicity and secretion. Lewis feels that malfunction can result in structural pathology. It would appear that psychogenic factors do play a role as a predisposing, or contributory factor in this disease.

SUMMARY

The need for caution in the diagnosis of psychoneurosis is emphasized. A case is presented which had been repeatedly examined, hospitalized, and under medical care, and was diagnosed as a psychoneurotic, a functional condition. At surgery he had findings of marked organic changes with a stenosing, obstructing regional ileitis. The diagnostic features of this disease, based on symptomatology and x-ray studies, are briefly reviewed. The possibility of psychogenic factors as contributory factors in the etiology are propounded.

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DISCUSSIONS

Dr. A. Partipilo (Chicago): Often the clinician and psychiatrist are too readily prone to attach the diagnosis of "psychoneurosis" to any patient whose symptoms are obscure or do not have findings of a classical clinical syndrome. In our experience, this is especially true of patients with undefined gastro-intestinal disturbances. Many will

give a history of having had one or more laparotomies, which not only failed to relieve them but very often aggravated the original symptoms. The physician should be on the alert and investigate the gastro-intestinal tract for congenital anomalies when a patient gives a history of repeated failure of medical treatment to relieve them.

We have had a number of cases of duodenal lesions with obscure symptoms. Sometimes the patient says, "I have had these since I was a boy going to school." With a history of that type and with gastric symptoms present, it should lead one to investigate the various anomalies that may occur in the gastro-intestinal tract, especially those of the duodenum and of the colon. The correct diagnosis can be made only when the physician bears these factors in mind and makes a thorough clinical and laboratory investigation.

In our experience, the most significant finding which inevitably leads to the correct diagnosis of these conditions is the history of the chronicity of the symptoms which very often date back to early childhood. It appears logical that, when a "psychoneurotic" patient presents vague gastro-intestinal symptoms of long standing, anomalies of the duodenum and colon, in addition to uncommon organic lesions, should be ruled out.

Dr. Sidney D. Klow (Elgin). In such a patient we have a questionable etiology. I wonder if Dr. Wiltrakis could offer any thought as to whether this illness of ileitis had been a chronic factor for many years, suddenly becoming acute in these last stages just before operation? Were these symptoms present all this time?

If not, I think that we can say in this particular case that the etiology of the ileitis was the functional illness, his neurosis, and that therefore the diagnosis of psychoneurosis was not incorrect, in spite of the fact that he did suffer from this organic brain disease.

Dr. Wiltrakis: I want to thank Dr. Partipilo for his talk.

Dr. Klow asked a question regarding the duration of this man's illness. According to the literature, chronic ileitis can exist for many years. How long this man had regional ileitis is unknown.

He had been in three large Midwestern clinics during the last six years and had gastro-intestinal work-ups at these clinics. The disease was not found but whether they took special films of the small bowel, I do not know. A person could have regional ileitis in various stages. There are four different phases and he could have had one of the phases with very few x-ray findings. Judging from the findings of surgery, it must have existed for a long time.

As I mentioned in my paper and also mentioned by Dr. Klow, this man needs considerable psycho-

therapy. He has been to doctors for years, he has been to clinics, etc., and he is not sure of himself. There is also the danger of redevelopment of an organic condition. Regional ileitis is a disease which may involve various parts of the bowel. It is not unusual for it to involve one part of the bowel and then jump twelve inches, or twenty-four

inches, and involve another part of the bowel, with a perfectly normal bowel in between. At operation, the diseased process was removed. There could have been some mild condition higher in the bowel which we did not see, and he could develop organic pathology later. Regional ileitis has a tendency to recur.

UTILIZATION OF DDT

The Federal Security Agency and the Department of Agriculture issued the following statement after a meeting of the principal Government agencies concerned with the utilization of DDT in national and international health and economy:

"A number of statements have been published during the last several days which have misled and alarmed the public concerning the hazards of using DDT as an insecticide.

"DDT is a very valuable insecticide which has contributed materially to the general welfare of the world. It has been used with marked success in both the control and prevention of such insect-borne diseases as malaria and typhus and of insects which are destructive to crops and injurious to livestock and infect homes.

"It is well recognized that DDT, like other insecticides, is a poison. This fact has been given full consideration in making recommendations for its use. There is no evidence that the use of DDT in accordance with the recommendations of the various Federal agencies has ever caused human sickness due to the DDT itself. This is despite the fact that thousands of tons have been used annually for the past four or five years in the home and for crop and animal protection. However, minor toxic symptoms may be produced by kerosene and various solvents used in DDT and practically all other insecticidal mixtures.

"Statements that DDT is responsible for causing the so-called 'virus X disease' of man and 'X disease' of cattle are totally without foundation. Both of these diseases were recognized before the utilization of DDT as an insecticide.

"The Food and Drug Administration has not prohibited the use of DDT in spraying dairy cattle and barns. The Federal Food, Drug and Cosmetic Act requires the Food and Drug Administration to insure that the food supply of the American people does not contain any poisonous or deleterious substance that is not necessary in the production of the food. Studies by the Bureau of Entomology and Plant Quarantine have shown that DDT, when used on dairy cattle or when present on fodder fed to dairy cattle, may appear in the milk. They also say that DDT in small quantities can be detected sometimes in milk, following ordinary use of the insecticide for fly control in dairy barns. Because of the vital importance of milk in the diet of infants, children and people of all ages, it is essential that proper precautions be taken to protect the milk supply. Modification of the recommendations made by the Department of Agriculture on the use of DDT on dairy cattle were made merely as a precautionary measure.

"There is no justification for public alarm as to the safety of the milk supply from the standpoint of DDT contamination." J. Indiana State Medical Association, May 1949.

The effect of the occupational environment upon the incidence and production of tuberculosis has been given careful study over many years. It is a fact that nurses and medical students are often subject to contact with an open carrier and therefore their respective occupations constitute a hazard peculiar to their occupation. As far as all other occupations are concerned, the evidence is, by and large, to the contrary. Rutherford T. Johnstone, *Am. Rev. Tuberc.*, Oct., 1948.

CASE REPORTS



Abdominal Pregnancy

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The occurrence of abdominal pregnancy, either primary or secondary, is generally considered to be uncommon. Yet the increasing reports of abdominal pregnancy in the medical literature, and even in the lay press, indicate this condition is perhaps more frequent than we realize. A recent article¹ gives an incidence of 1 to 1160 in a series of hospital obstetrical admissions, and this figure might indicate an increase in the recognition of, or a true increase in the numbers of abdominal pregnancy.

Whether true abdominal or primary abdominal pregnancy actually occurs; or whether it is secondary to an ectopic pregnancy in the Fallopian tubes, and after rupture of the tube, or extension of the gestation through the ostium of the tube into the general peritoneal cavity, is a matter only of academic interest. The treatment remains the same: namely, surgery; and because of its increasing prevalence the obstetrician and general surgeon, should keep this condition in mind in the differential diagnosis of unilateral pelvic mass.

The following case is reported to focus again our attention on this entity, and also because it illustrates that there may be no signs or symptoms suggestive of pregnancy, which may further cloud the diagnosis.

The patient (Mrs. W. S.) is a 30 year old white female, who was seen in the office on August 5, 1948, with the complaint of pain in the lower abdomen of 12 hrs. duration; the pain more severe over the midline suprapubically and right lower quadrant. This pain was sharp, and was severe enough to awaken her from a sound sleep during the night. Associated with the pain were nausea, a sensation of faintness, and diarrhea. In her past history she had been delivered of 3 normal pregnancies in 1943, 1945, and the last in February, 1947. After the last pregnancy she was advised because of a mitral regurgitation, dating 10 years previously to an acute rheumatic fever attack, to have a puerperal tubal ligation, which she refused. She had been entirely well since her last pregnancy to this present attack.

On examination there was moderate tenderness throughout the lower abdomen, not associated with rebound tenderness. Pain on palpation was more acute just to the right of midline above the symphysis. Rovsing's sign was negative. Peristaltic sounds were hyperactive. She stated she was in the 3d day of her menstrual period. Because of the gastro-intestinal symptoms, and the prevalence of gastro-enteritis in the community she was placed on milk of bismuth, diet, and bed rest. She gradually improved and after the menses were over she was examined pelvically. On pelvic examination a tense firm mass, the size of a large grapefruit, was felt in the right lower quadrant. The uterus was palpated to the left of the tumor. It was also noted that her skin color had become rather pallid, with a slight yellow-green tint. The examination caused the pain in the lower abdomen to become worse and now more marked in the right lower quadrant, and she was advised to enter the hospital with the tentative diagnosis of right ovarian cyst, probably twisted. The pain was so severe it was relieved only with morphine Gr. $\frac{1}{4}$ hypodermically.

On August 10th she was admitted to the hospital and a general workup begun. The complete physical examination was normal except for the mitral diastolic murmur, the tenderness abdominally and the presence of the pelvic mass. Chest x-ray was normal, heart size being within normal limits. Laboratory examination revealed a marked anemia; Hb. 42% RBC 2,360,000, WBC 9,300; Kahn negative; Rh positive. Temperature varied daily from 98.6° to 100.4°. Two transfusions of 500 cc. each were given and the Hb. increased only to 50%. Coincident with bed rest the pain gradually disappeared. The Friedman test taken routinely on August 11th was reported positive, and because of the improvement in symptoms the patient requested and was permitted to rest in bed at home on liver and iron therapy. She stated that she was not pregnant in spite of the Friedman test; that the menses had been normal and regular. The breasts were flat and no colostrum was present in the nipples. Because of the pressure of the mass in the vagina, Chadwick's sign was discounted.

At home the pain gradually returned and became severe, without any gastro-intestinal symptoms, and she was readmitted to the hos-

pital on August 30, 1948 at which time the mass was found to be greatly enlarged, extending to within 1 inch below the umbilicus. Vaginal examination revealed the mass bulging in the cul-de-sac so that the pressure almost entirely obliterated the vagina.

On August 31st a flat plate of the abdomen revealed no evidence of osseous density indicative of a pregnancy. However, a mass the size of a 4½ to 5 month pregnancy was displacing the bowel out of the true pelvis. X-ray impression was that of a tumor, no indication of pregnancy.

The patient was seen in consultation by Dr. Grover Q. Grady, a surgeon, and Dr. E. M. Solomon, an obstetrician, who independently advised surgery after further transfusions. Diagnosis most likely was that of huge ovarian cyst. September 1st Friedman test was again positive. Hb. was now 58% and after 2 further transfusions, the operation was performed under nitrous oxide anesthesia on September 2d.

At operation (R. K. & G. G.) a large hemorrhagic mass extending to the umbilicus was found; it consisted of old and recent large blood clots and the clots were adherent to the omentum, peritoneum and in the cul-de-sac. In the center of this mass was a live fetus of 3½ to 4 months gestation surrounded by a round firm placenta. On investigating the mass manually the fetus and placenta were removed intact with very little tension, and after cleaning the area of blood clots it was found that the placental site was the posterior surface of the uterus and the right broad ligament. The uterus was soft, enlarged to the size of a 2 months pregnancy, and as its posterior surface continued to ooze after removal of the placenta, as supracervical hysterectomy was performed. The left tube and left ovary were normal. The distal third of the right tube and right ovary were incorporated in the mass of clots and were not identified separately. After peritonealization of the cervical stump and broad ligaments, a square of oxycel, approximately 3 x 6 inches was placed over the cervical stump area, posteriorly and the cul-de-sac, to minimize further oozing.

Following the operation the patient was given 2 more 500 cc. transfusions and on the 5th day became ambulatory and was discharged on September 10th, 8 days after the operation, after a normal convalescence. Her RBC was 4,520,000 and Hb. 81%. Six weeks post-operatively she



12 cm. male fetus and attached to placenta uterus on right.

was examined and found to be in excellent condition.

The pathological report was as follows: — "Specimen consists of a 12 cm. male fetus with a 15 cm. umbilical cord attached to a placenta 14 x 12 x 3 cm. Large blood clots up to 3 x 2 cm. are seen on the placental surface of attachment and about the uterus and right tube. In addition a corpus uteri 7 x 7 x 6 cm. is submitted with a normal left tube. Only the uterine portion of the right tube is identified. The endometrium is 1 cm. thick and very soft. Ovary cannot be identified. Diagnosis: Abdominal pregnancy, 3½ month male; intra-abdominal hemorrhage; uterine decidua."

COMMENT

The treatment of the placenta at operation is a matter of special concern. There are 3 standard procedures in dealing with the placenta. (1) Marsupialization, (2) removal, (3) leave placenta alone and permit absorption to take place. Reports of cases in which the placenta has been left in the abdomen stress the possibility of infection with abscess formation and possible drainage being required. Even in an early case as this, removal of the placenta caused some concern, relative to oozing from the posterior

surface of the uterus, so that a supracervical hysterectomy was performed. Furthermore a layer of oxycel was used to lessen the possibility of further bleeding. The use of oxycel or gelfoam might be a further reason to remove the placenta, if the organ were not too firmly attached to the abdominal structures, particularly in a relatively early case such as this one. If the placenta is not removed, the use of antibiotics and chemotherapy would be definitely indicated.

SUMMARY

(1) The incidence of abdominal pregnancy is higher than generally realized.

(2) The use of hemostatic agents, as oxycel and gelfoam, may further change the operative care of the placenta so that the organ may be removed in a greater number of cases.

(3) A case is reported of a 3½ month abdominal pregnancy without signs or symptoms of gestation, except routine Friedman test which was positive. Operation was necessary because of severe, painful intra-abdominal bleeding. Diagnosis established only at operation. Uneventful recovery of patient.

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Acute Regional Ileitis In An 80 Year-Old Male

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Since the monumental report of Crohn, Ginzburg, and Oppenheim in 1932¹, the medical profession has become increasingly aware of the disease entity termed regional ileitis. This disease is usually recognized in its chronic cicatrizing state, but may be encountered in a more acute form in a patient mistakenly considered to have appendicitis. Characteristically, it is a disease of a young age group, and is rather infrequent in older persons. The oldest patient with this disease that has previously been reported was a 70 year-old male described by Benoist². Because of these circumstances, we wish to report an acute form of the disease occurring in an 80-year-old male. Furthermore, we are prompted to make this report since we had an opportunity of studying the lesions of the bowel as they appeared three weeks following a transverse ileocolostomy, and of observing their rapid resolution.

The patient was a white male who had been in good health until his last illness. His only previous complaints were a sense of bloating and mild upper abdominal pain following ingestion of large meals during the last two years. His acute illness began with a gradual onset of cramping pain in the left upper abdomen. In the ensuing 36 hours before admission to the hospital, he experienced a steady increase in the pain and had episodes of watery vomiting. He had several bowel movements during that period. Examination revealed a well-developed, well-nourished, white male. His blood pressure measured 124 mm. of mercury systolic, and 80 mm. of mercury diastolic. His pulse was 80 and respirations 20 per minute respectively. The pertinent findings were limited to his abdomen which showed a moderate distention throughout, and moderate tenderness in the left upper abdomen. There was neither rigidity nor rebound tenderness. During the next 24 hours, the abdominal distention became more marked, peristaltic sounds became higher pitched, and there were no further bowel movements nor evacuation of gas per rectum. Laparotomy was performed

through a left paramedian incision. The peritoneal cavity contained about 15 cc. of serous fluid in the region of the ileocecal junction. The jejunum and proximal ileum were moderately distended and the distal two feet of ileum contained four discrete constricting lesions, the distalmost one of which was at the ileocecal junction. These lesions measured two to three centimeters in length, and caused so great a constriction of the intestine that it was impossible to force the little finger through the lumen. The bowel wall was largely covered with fat in these areas. The mesentery of the distal two feet of ileum was greatly thickened, edematous and contained many large lymph nodes.

Because of the patient's age and the acuteness of the disease, it was decided that resection was inadvisable, and so a side to side short-circuiting ileotransverse colostomy was done. Postoperatively, the patient experienced circulatory difficulties for two days but then made steady progress for two weeks. He was eating well and having normal bowel movements. Unfortunately, due to difficulty in expelling urine, he required an indwelling catheter. The patient developed an infection around the catheter which led to a perivesical abscess and an ascending pyelonephritis, which caused his death on the twenty-first post-operative day.

Post-mortem report pertaining to abdomen was as follows:

Gross: "There is no ascites. The small bowel has a good color. It is not distended, and there does not appear to be any obstruction. There is a recent anastomosis between the terminal ileum and the transverse colon at a point about 35 cm. above the ileocecal junction. The ileum below the anastomosis is slightly discolored and indurated. This reaction extends over an area of 4 to 5 cm. in length. A similar condition also exists in the terminal 3 to 4 cm. as it approaches the cecum. The mesentery of the 35 cm. portion of terminal ileum is somewhat indurated, and there are some small, pinkish-gray lymph nodes present. In the indurated

portion of the ileum, the mucosa has a bluish discoloration, and presents four large, shallow ulcerations with ragged edges. The largest of these is about 2.5 cm. in diameter. They do not have any particular line of direction. The lumen is only slightly constricted. The remainder of the bowel appears essentially negative. The stomach and esophagus are negative.

"The gall bladder contains a small amount of thick yellowish-green fluid. Its mucosa is inflamed. There are no stones. The liver has a uniform structure with a dull reddish-gray color. The pancreas and spleen are not unusual.

"The urinary bladder shows a thickened wall, an inflamed mucosa, and contains cloudy, purulent urine. The prostate is large and nodular. There is a large paravesical abscess to the left of the bladder. This contains thick, creamy-white pus. The ureters are negative. The kidneys are swollen (200 gm.) and have a grayish-red color. The cortical surfaces are smooth. There is no distention of their pelves."

Microscopic (Summarized): "The involved ileum shows a fairly marked chronic inflammatory reaction which extends from the mucosa through the muscularis and is also apparent on the serosal side. It is characterized by an infiltration of lymphocytes with plasma cells and some eosinophiles. Occasional polymorphs are present. There are no giant cells. Nothing suggesting tubercles is noted. The mucosa shows necrosis in the ulcerated areas. The muscularis is slightly hypertrophied."

Other findings were mild focal hepatitis, mild cholangitis; marked diffuse pyelonephritis; moderate cystitis, and paravesical suppuration.

COMMENTS

This case appears to us to present two features worthy of interest. First of these is the fact that the patient was 80 years of age, and to the best of our knowledge, 10 years older than any previously reported patient. The second noteworthy feature was the very marked resolution that took place in the pathology of the ileum in the three weeks following the short-circuiting operation. How much this may have been influenced by the operation is difficult to evaluate. It quite probably was a factor. We believe, however, that this observation lends some credence to the possibility that many cases of unexplained enteritis are in reality instances of regional ileitis in an acute form. It may be that such cases resolve, and do not go on to the chronic cicatrizing condition that typifies the disease.

SUMMARY

1. A case of acute regional ileitis occurring in an otherwise healthy male 80 years of age is presented.

2. Following a short-circuiting operation there was a marked resolution of lesions over the three week period.

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RECURRENT 'COLDS' MAY BE DUE TO ALLERGY

Persons who just get over one cold when another starts or have asthma only when they catch cold may be suffering from an allergy, according to a Rochester, N. Y., doctor.

Writing in the May 7 Journal of the American Medical Association, Stearns S. Bullen, M. D., of the

Department of Medicine, School of Medicine and Dentistry, University of Rochester, says that the majority of patients who describe such symptoms to doctors probably have allergic conditions rather than infections.

There is a growing body of evidence that the cause of periarthritis nodosa, dermatomyositis, and one kind of kidney disease may be sensitivity to certain substances, he points out.

Chronic Right Lower Quadrant Pain With Urinary Symptoms

**Edson L. Etherton M. D., James H. Skiles M. D.
and Charles A. Siler, M. D.
Oak Park.**

R. B., a 23 year old white male was admitted to the surgical service of the West Suburban Hospital on 9-17-48 with complaints of persistent RLQ pains and frequency of urination for the past two years. On the day of admission the pains became more severe and were accompanied by nausea and vomiting. He was admitted ambulatory, walking in a stooped position. No history of pyuria or hematuria but the patient related that he had received treatment for dysuria about one year previously. Physical examination, T. P. R. 99.2-88-22, B.P. 146/80, marked pointed tenderness over McBurney's point with definite rebound and psoas tenderness. Otherwise the examination was essentially negative.

Laboratory Report: W. B. C. 15,750 — Urine, cloudy appearance, straw color acid reaction; Sp. Gr. 1.024. Albumin and sugar negative, trace of acetone. Microscopic pus cells 2-4 per hpf, occasional epithelial cells. No red cells or casts were noted.

In a resume of the history and physical findings a flat plate of the abdomen was made. It revealed a lamellated radio-opaque object in the RLQ, the size of an olive. An I. V. pyelogram was then made and revealed that both kidneys

and ureters were essentially negative with no evidence of obstruction. The radio-opaque object was noted laterally to the course of the right urter of the RLQ. In view of the history, physical, laboratory and x-ray studies, a preoperative diagnosis of acute appendicitis containing a large stone was made. The patient was taken to surgery for an appendectomy.

Operation: Muscle splitting incision, appendix removed, stump ligated, cauterized and inverted with a double purse string. Abdomen closed in layers using plain — O catgut for peritoneum, 32-steel wire for deep fascia, and black silk for skin.

Gross Findings: The appendix was about the size of a frankfurter and contained a stone the size of a small olive. The appendix was red, thick and adherent to the neighborhood of the bladder.

The patient made an uneventful recovery and went home on the 5th post-operative day.

DISCUSSION

A case with persistent RLQ pains and urinary symptoms of frequency and urgency for the past two years has been presented. Calcified appendi-



ceal fecaliths have been reported previously in the literature. The differential diagnosis of such a radio-opaque object offers a problem to the roentgenologist and surgeon as the object may be a phlebolith, calcified mesenteric node, enterolith of the intestine, gall stone or ureteral stone.

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Intussusception of the Appendix

**Martin E. Conway, M.D.,
Aledo**

On January 25, 1949, G.A.G., a five year old boy was presented to me by his mother, who related a recent (2 months) history of restlessness, abdominal distress, nausea, and loss of appetite. There was a definite history of a round worm infestation which had not been treated. The abdominal distress, increased in severity twelve hours prior to examination, was associated with "loose" stools — no blood. Physical examination revealed a poorly nourished boy. The head, neck, heart and lungs were essentially negative. The abdomen was rotund. There was complaint of tenderness over McBurney's point, right rectus rigidity, and a questionable palpable mass in the right lower abdominal quadrant on rectal examination.

The WBC was 28,000, differential; polys 70%, eosinophiles 10%, lymphs 20%; urine-negative, Kahn-negative, sed. rate 14 mm. in one hour, temperature 98.8°F. Surgical interference was withheld for 24 hours and following administration of 300,000 units of penicillin in wax and tap water enema, the symptoms subsided.

A second rectal examination disclosed the definite presence of a firm mass in the right lower quadrant. Rectus rigidity was not present and there was no complaint of tenderness. The WBC was then noted to be 36,000, differential the same, as the previous day.

The abdomen was opened. Straw colored fluid filled the peritoneal cavity. The omentum was lying protectively over the caecum and terminal ileum. The appendix tip was visualized, approximately one cm. in length. On grasping the caecum, the appendix could be felt within the caecum where an intussusception had occurred. The appendix was removed after "milking" the proximal portion from the caecum.

After fixation, the appendix was 5.8 cm. long and 0.7 cm. in diameter. Histologically the appendix was essentially normal with the exception of fibrous tissue obliteration of the lining together with secondary thinning out of the involved intussuscepted area.

Recovery was uneventful.

PATHOLOGY CONFERENCES

EDWIN F. HIRSCH, DEPARTMENT EDITOR



Reticulum Cell Lymphosarcoma of the Thyroid Gland

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Cancerous tumors of the thyroid occur fairly often, and of these, sarcomas are the less frequent. The histological structure of sarcomas ranges markedly. Of 40 sarcomas analyzed by Norf¹, 10 were round cell, 6 spindle cell, 5 alveolar, 3 fibrous, 2 osteoid, and 7 mixed. Ewing² in his text on Neoplastic Diseases stated that despite the wide acceptance of numerous reports of sarcoma of the thyroid there is much evidence to favor the opinion that many of these tumors are probably epithelial in origin. The diagnosis of sarcoma often has been based on a superficial resemblance to a mesoblastic tumor. Therefore many authors, appreciating the uncertain position of some thyroid sarcomas, have said that no sharp division exists between carcinoma and sarcoma. The diagnosis of sarcoma or carcinoma basically depends upon the identification of the

tissue composition of the tumor. This with sarcomas may be difficult unless the mesoblastic tissues are differentiated to a characteristic level, such as cartilage, bone, or striated muscle tissues. Ewing further stated that in his material the transformation of thyroid epithelium into spindle, round, and giant cells, produced structures resembling sarcomas and lead him to conclude that the mesoblastic origin of many sarcomas reported in the literature is highly improbable, and that the occurrence of a true sarcoma of the thyroid in man, as yet, is to be demonstrated. This view, obviously, is extreme. Lymphosarcomas and more specifically reticulum cell sarcomas are rare. My report includes some statements of the occurrence of these tumors in the thyroid gland and describes two additional reticulum cell lymphosarcomas observed in the routine examination of surgical material at St. Luke's Hospital.

From the Henry Baird Favill Laboratory of St. Luke's Hospital.

Lymphosarcomas may be arranged into two groups: 1) those arising from the lymphoid tissues proper, and 2) those arising from reticulum cells. The nodular lymphosarcoma, giant folliculoma or Brill-Symmers' disease may be the initial stage of some lymphoblastic lymphosarcomas. The follicles become enlarged and gradually fuse. Grossly there is no characteristic appearance, and the tissues are grey and homogeneous. Microscopically these lymphoid tissues have large, pale follicles which contrast with the more compact lymphoid tissue pulp. The germinal centers have masses of cells similar to immature lymphoblasts. The lymphosarcomas arising from lymphoid tissues may be arranged further into the lymphocytic lymphosarcoma, or small-celled lymphosarcoma, and the lymphoblastic, or large-celled lymphosarcoma.

The lymphocytic lymphosarcomas grossly are grey to tan in color and are moderately firm tissues. Microscopically, they consist mainly of small lymphocytes which have replaced entirely the basic lymph node structures. The nuclei are darkly stained and cells in mitosis are common. The lymphoblastic, or large-celled lymphosarcoma, has no specific gross characteristics beyond its lymph node distribution. Microscopically the tumor consists of lymphoblasts, many in mitosis. There may be a few neoplastic giant cells of the Reed and Sternberg type and eosinophil leukocytes, thus containing tissues with a similarity to those of Hodgkin's disease.

Roulet^{3, 4} is credited with the recognition of a third form of lymphosarcoma, which he described as "Rethelsarkom" but is more generally known as "reticulum cell sarcoma". Prior to Roulet, however, Ghon and Roman⁵ described lymph node tumors with origin from reticulum cell tissues. In its gross appearance this sarcoma also resembles lymphosarcoma but the histologic structure is different. A marked overgrowth of reticulum cells with varying amounts of stroma replaces the lymphoid tissues. Masses of these cells may have a superficial resemblance to epithelium. Thus the lymphoid tissue is invaded and replaced by cords and masses of cells with vesicular nuclei and pale cytoplasm, sometimes resembling metastatic carcinoma, but recognized by their internal structure, cell relations and reticulum fiber formation. A silver impregnation aids in the diagnosis, because the cell masses of

these tissues are traversed or penetrated by reticulum fibrils.

Gall and Mallory⁶ have divided the reticulum cell sarcomas into two varieties: 1) tumors composed of relatively well differentiated wandering cells with phagocytic properties resembling monocytes or clasmatoocytes; and 2) tumors of highly undifferentiated, presumably pluripotential cells which they have chosen to designate stem cells. Thus, these authors classify the reticulum cell sarcomas into the stem cell lymphoma and the clasmatoeytic lymphoma. Their 618 tumors were analyzed, however, on the basis of classification and not as to specific site of origin.

Wegelin⁷ believed that many round cell sarcomas of the thyroid gland were lymphosarcomas and that they developed from lymph nodules of the thyroid gland. In 1878 Kaufmann⁷ noted a resemblance between many sarcomas of the thyroid and those of lymph node tissues. Rice⁷ in 1932 reported five lymphosarcomas of the thyroid observed between 1922 to 1929 in the Pathologic Institute at Bern, and concluded that: 1) lymphosarcoma of the thyroid gland probably begins in lymphoid tissues within the gland; 2) no evidence exists to indicate that lymphosarcoma develops from chronic thyroiditis because the tumor-free tissues have no chronic inflammation; and 3) lymphosarcoma may develop in an old nodular goiter, as well as from a normal or diffusely enlarged thyroid gland, because lymphoid tissues may occur in the stroma of adenoma nodules as well as in thyroid gland tissues. Smith, Pool, and Olcott³ reviewed 54 cancers of the thyroid observed in the pathological laboratory of the New York Hospital during 13 years but were unwilling to classify any as sarcoma without qualification. Three or four of the so-called small round cell forms could have been designated lymphosarcoma. Vaux⁹ reported one cancer of the thyroid as a sarcoma but without further subclassification. This was among 25 cancerous growths of the thyroid observed during three years in the Pathology Unit of the Royal Free Hospital, London. Microscopic examination demonstrated that the tumors had polymorphic lymphocyte-like cells in a scanty stroma with many thin-walled blood vessels. Scattered among these cells were many single reticulum cells, some with double, and occasionally, three

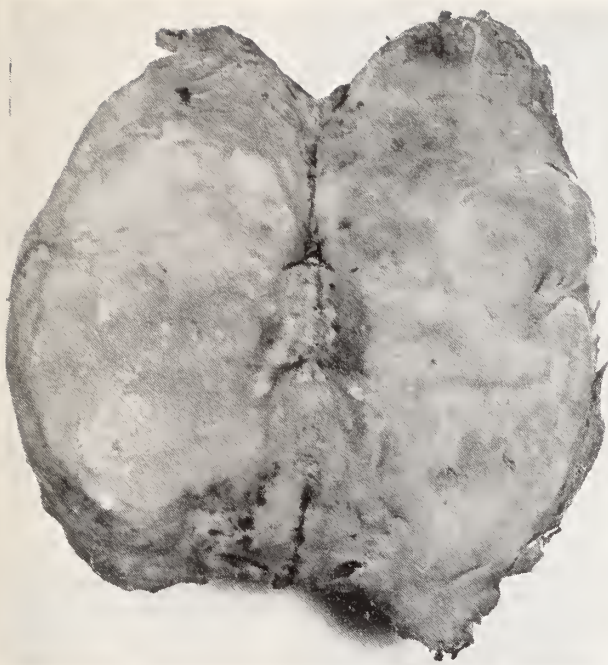


Figure 1. Photograph illustrating the lymphosarcoma of the thyroid (Case 1).

or four nuclei. Sections stained according to the Bielschowsky-Foot method demonstrated numerous argyrophil fibers in close association with the cells. Pemberton,¹⁰ in a review of 774 patients with cancer of the thyroid in the Mayo Clinic from 1907 to 1937, found 4 sarcomas or 0.8 percent. Welti and Hugenin¹¹ reported 3 from the surgical service of the Laennec Hospital and the Institute of Cancer at Paris among 88 cancerous tumors of the thyroid treated between 1926 and 1938. These three sarcomas were classified as two reticulosarcomas and one lymphosarcoma. Watson and Pool¹² reported five lymphosarcomas in 167 cancerous lesions of the thyroid or a 3 percent rate of occurrence. Craig and Shepard¹³ reported one highly undifferentiated reticulum cell sarcoma and concluded that the reticulum cell sarcoma of the thyroid, while extremely rare, should be recognized as a pathological entity. Trepe, Morin and Lemieux¹⁴ in 1943 reported one lymphoblastic sarcoma, primary in the thyroid gland, with metastasis to the testicles.

Case No. 1 — A 60 year old white male was admitted to the service of Dr. John T. Reynolds on July 11, 1947 complaining of an "enlarged goiter" which had developed suddenly one month prior to admission. Also, he complained of a dysphagia, especially of solid food, a non-productive cough, hoarseness and a deepened pitch of the voice. There was no history of previous thy-

roid gland disorder such as tumor, palpitation, heat intolerance, night sweats or excessive nervousness. Physical examination revealed a well developed, well nourished white male, approximately 60 years of age, with a large, non-tender mass in the left side of the neck which displaced the trachea to the right. The laboratory examinations were essentially negative. On July 12, 1947, thyroidectomy and tracheotomy were performed and an unusual condition in the neck was disclosed. The line of cleavage between the thyroid and the surrounding tissues was gone. The thyroid tissues were friable, edematous, poorly demarcated and extended into the carotid sheath and the muscles of the neck. They also extended behind the trachea and lower portion of the pharynx. Resection of the entire tumor mass was impossible. The post-operative course was uneventful, except for a bilateral vocal cord paralysis and the patient was discharged to the Hines Veteran Hospital, Chicago for deep x-ray therapy.

Macroscopic Description: The mass of grey tissue removed was roughly pyriform, 12.5 by 8 by 6 cms. and weighed 184 grams (Figure 1). Considerable portions had a fibrous capsule but on one side toward the base the tissues were denuded, a region 7.5 by 7 cms. Surfaces made by hemisecting the mass were elastic, rather firm grey tissues with a few foci of necrosis and like tissues of a hyperplastic lymph node. Six other smaller masses of traumatized tissue weighed 48 grams and together equalled a mass about 6.5 by 6 by 3 cms. These tissues also on surfaces made by cutting were grey, translucent and like hyperplastic lymph node tissues.

Microscopic Description: Histologic preparations from various levels of these tissues were essentially alike in cell structure. They had no appreciable residues of the thyroid but consisted mainly of cellular, mesoblastic tissues (Figure 2). Narrow fibrous septums with blood vessels extended as a coarse mesh in these tissues, and in the interstices were aggregates of medium sized cells like reticulum cells of lymph nodes. They had a small amount of granular cytoplasm and vesicular nuclei with chromatin granules. Among these cells were many in mitosis, and a few large cells had lobed or several vesicular nuclei. The cellularity of the tissues was remarkable, and small foci were necrotic. In a

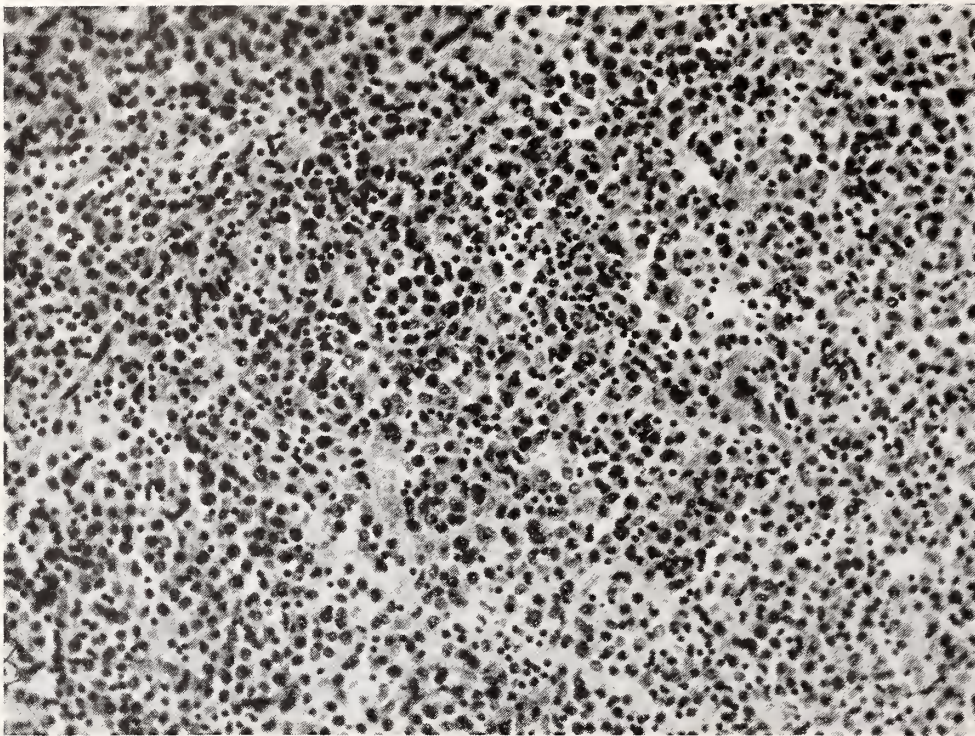


Figure 2. Photomicrograph illustrating the reticulum cell structure of the sarcoma tissues (Case 1). X-198

few places the tissues had considerable collagenous stroma in coarse fibers or bands. A place in one section consisted mainly of lymphoid tissue but with residues of the basic thyroid tissues extensively penetrated by tumor cells. In this portion were several misshapened thyroid gland acini lined by cuboidal epithelium. The lumens contained a little colloid material. A condition not clear was the presence in the tissues of several scattered aggregates of squamous epithelial-like cells, all of them small but probably also

modified residues of thyroid gland epithelium. Many cells in mitosis were observed in the tumor tissues. The characteristics of the tumor cells corresponded to those of a reticulum cell lymphosarcoma without appreciable amounts of collagenous connective tissue, except in a few places.

Diagnosis: Reticulum cell lymphosarcoma of the thyroid.

Case No. 2 — A white female aged 55 years entered St. Luke's Hospital to the service of Dr. Guy V. Pontius on September 8, 1947, complain-



Figure 3. Photograph illustrating the excise thyroid tissues with lymphosarcoma (Case 2).

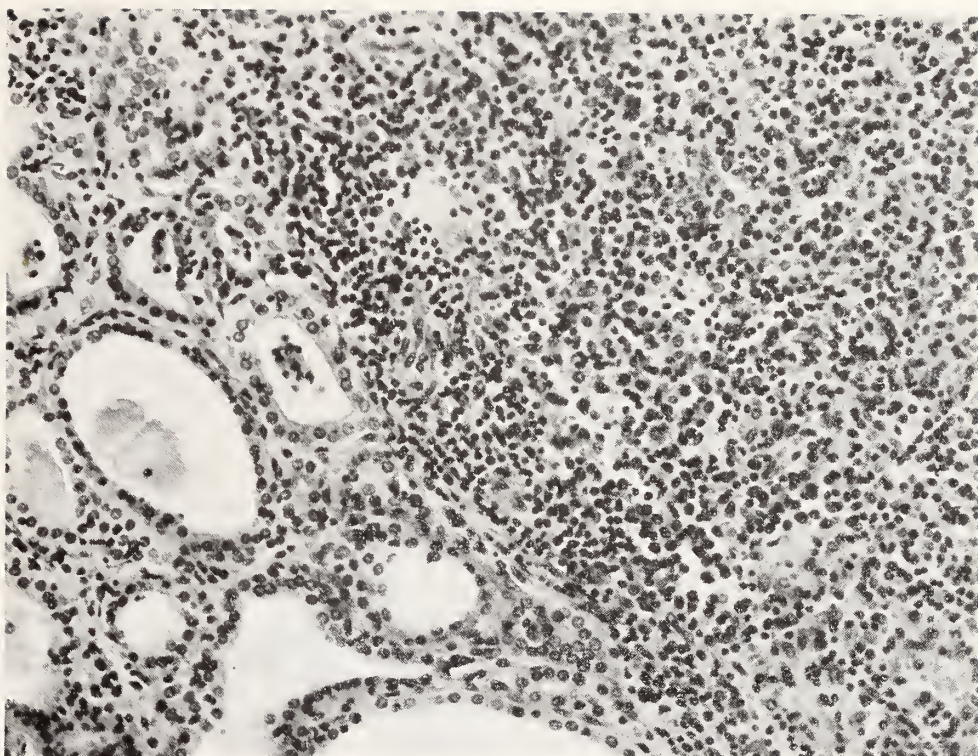


Figure 4. Photomicrograph illustrating the reticulum cell sarcoma invasion of the thyroid gland (Case 2.). X-198

ing of choking and dyspnea, relieved by tilting the head backwards; dysphagia mainly of solid foods; enlargement of the neck, and hoarseness. The first swelling in the neck had occurred about nine months previously and became about the size of a plum but gradually regressed. Twelve weeks prior to admission, the swelling appeared again and became progressively larger. The patient was well-developed and well-nourished with a firm mass in the neck which surrounded the trachea and extended downward filling the suprasternal notch. Laboratory examinations revealed a minus 4 percent basal metabolic rate. On September 11, 1947 a subtotal thyroidectomy was performed. The enlargement involved the left lobe and isthmus. The skeletal muscles were invaded and the thyroid tissues were closely adherent to the trachea. The post-operative course was uneventful.

Macroscopic Description: The nodular mass of thyroid tissue was 10 by 5 by 3 cms. (Figure 3). The capsule had torn ends of fibrous tissue. Surfaces made by cutting were soft, grey and moist tissues like hyperplastic lymph nodes. Portions had small mottlings of yellow.

Microscopic Description: The histological preparations from various levels of these tissues were alike in cell structure. They had only small residues of the basic thyroid gland and consisted

mainly of cellular mesoblastic tissues (Figure 4). Narrow fibrous septums extended in a coarse mesh in the tissues and in the interstices were aggregates of small and medium-sized cells like reticulum cells. Among these were many in mitosis and a few large cells had an oval, bilobed nucleus, some with two nuclei. Certain portions had considerable lymphoid tissue, while other regions had groups of involuted thyroid acini lined by cuboidal epithelium and with lumens containing colloid. At other levels there were better preserved thyroid gland acini with colloid material in the lumens and embedded in lymphocytes.

Diagnosis: Reticulum cell lymphosarcoma of the thyroid.

COMMENT

Many varieties of sarcomas of the thyroid gland have been described, some apparently not clearly distinguished from carcinomas or classified into specific subgroups. As a result, confusion seems to exist concerning the varieties of sarcomas in the thyroid gland. Despite this, lymphosarcomas and reticulum cell lymphosarcomas do occur as specific tumors, and a review of the literature to date reveals a description of 12 definite and 4 probable lymphosarcomas, and in addition, 3 definite and 1 probable reticulum cell lymphosarcomas of the thyroid gland. Two

more primary reticulum cell lymphosarcomas of the thyroid gland are described.

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PRINCIPAL ORGANIZATIONS PROMOTING COMPULSORY SICKNESS INSURANCE

In order that our readers may know the principal organizations promoting compulsory sickness insurance and their personnel, we are listing them:

The Committee for the Nation's Health is located at 1790 Broadway, New York City. Dr. Channing Frothingham is chairman of the committee, and Michael M. Davis is chairman of the Executive Committee. Included on the committee are: Mrs. Eleanor Roosevelt, Gerard Swope, David Saranoff, Mrs. Gardner Cowles (a staff member of *Look Magazine*), Abe Fortas (a law partner of Thurman Arnold), and the presidents of the A. F. of L. and the C. I. O. The membership consists of some 2700 persons, 22 per cent of whom live in New York, and less than 8 per cent of whom are physicians.

The Physicians Forum is a group of physicians also working for compulsory government insurance. Dr. Ernest Boas of New York is chairman. According to Dr. Boas' testimony in Congress, the Forum has about 1000 members, of whom almost 600 are located in New York State and about 100 are located west of the Mississippi.

The Committee of Physicians for the Improvement of Medical Care, according to Dr. John Peters, consists of some forty physicians, most of whom are in the New York-New England area. Dr. Edward L. Young of Boston is chairman, and among the other officers are: Dr. Channing Frothingham, Dr. John Peters of

New Haven, Dr. Ernest Boas of New York, and Dr. Dean Clark of New York.

The Committee for the Research of Medical Economics, also located at 1790 Broadway, New York, has as its chairman, Michael M. Davis.

The name of Dr. Boas appears on the membership of all four organizations; Dr. Peterson, on three; and Dr. Frothingham, also on three. There is an apparent interlocking of directors and members in the four organizations. *Minnesota Medicine*, March — 1949.

INCIDENCE OF BRONCHOGENIC CARCINOMA

The incidence of primary pulmonary carcinoma of bronchial origin has shown a remarkable increase in recent years. Prior to 1910, only 2 per cent of all deaths from cancer were attributed to this type of tumor. Today, the statistics show that in from 12 to 15 per cent of all such cases coming to autopsy the disease is of bronchial origin. Even more surprising are the figures showing that 8 per cent of all cancer is of this type. These statistics seemed unbelievably high until I consider that in a period of only one year there have occurred 4 proved and one strongly suspected case in the local, relatively small 75 bed hospital.

What are the reasons for this great increase in the incidence of bronchogenic carcinoma? Some believe the increases in the uses of tobacco, gasoline and other coal-tar products may be factors.—*Knight, J. Florida M. A., March '49.*

NEWS OF THE STATE



CARROLL

Society Election.—Dr. H. C. Pauley and Dr. Ruth E. Church, both of Savanna, were reelected president and secretary-treasurer, respectively, of the Carroll County Medical Society at a recent meeting. Dr. Glen E. Mershon, Mount Carroll, was elected delegate to the Illinois State Medical Society and Dr. E. C. Turner, Savanna, alternate.

CHAMPAIGN

Society News.—Dr. Milton Tinsley, Chicago, discussed "The Treatment of Intractable Pain" before the Champaign County Medical Society, April 14, at the Champaign County Country Club. Dr. Tinsley is assistant professor of neurosurgery at the University of Illinois College of Medicine.—Dr. Irving F. Stein, associate professor of obstetrics and gynecology, Northwestern University Medical School, addressed the Champaign County Medical Society, May 12, on "Technique and Value of X-ray Visualization of the Female Genital Tract in Gynecologic Diagnosis."

COOK

Dr. Domke Goes to St. Louis.—Dr. Herbert Domke, medical director, Chicago Health Department, has been appointed St. Louis County health commissioner. He will assume his new duties July 1. He now is doing research work at Harvard Medical School.

Special Society Election.—The officers of the Chicago Roentgen Society for the year 1949-1950 are as follows: Dr. T. J. Wachowski, Wheaton, president; Dr. Frank Hussey, Chicago, vice president and Dr. John Gilmore, Chicago, secretary-treasurer.

Branch Meeting.—The North Suburban Branch of the Chicago Medical Society was addressed

April 11, by Dr. E. S. Burge on "The Use and Misuse of the Estrogens" and Dr. W. C. Danforth on "Carcinoma of the Cervix". The discussants were Dr. Ronald R. Greene and Dr. H. J. Holloway, respectively.

Mental Hygiene Society Honors Members.—The Illinois Society for Mental Hygiene conferred honorary vice presidencies on two members, Mrs. George Dean and Dr. Ralph C. Hamill, at its recent annual meeting. Mrs. Dean has served the society for thirty years as a member, director and vice president. Dr. Hamill has been with the organization since it was founded in 1910, is a past president and is now chairman of the children's commission.

Appointments at Loyola University.—Stritch School of Medicine of Loyola has appointed Dr. George J. Rukstinat, attending pathologist at Cook County, Loretto and Holy Cross Hospitals, as clinical professor of pathology, and Dr. Louis F. Plzak, chairman of the department of surgery at Loretto Hospital, as clinical assistant professor of surgery. Dr. Fred R. Zeiss, Little Company of Mary Hospital, was appointed clinical associate in the department of bone and joint surgery and Hugh J. McDonald, Sc.D., professor of physical chemistry and chairman of the department of biochemistry. Dr. McDonald has been professor of chemistry at the Illinois Institute of Technology.

Robert Zeit Lecture.—Dr. Lester R. Dragstedt gave the Frederick Robert Zeit lecture, May 6, under the auspices of the Xi Chapter of Alpha Kappa Kappa Fraternity. The title of his talk was "The Physiologic Principles of Surgery of the Pancreas".

Proposed Cancer Research Hospital.—A six story hospital, to cost $3\frac{1}{2}$ million dollars, will be devoted exclusively to cancer research, according to tentative

plans announced in the press, April 7. The proposed unit will contain 50 beds and will be equipped to process the latest kind of radioactive substances for the research treatment of selected patients. Construction is expected to start October 1 and it is hoped that the hospital will be ready for operation late in 1951. The new unit will be known as the Argonne Cancer Research Hospital and will be under the supervision of the University of Chicago which will adjoin the Nathan Goldblatt Memorial Hospital for Neoplastic Diseases, now under construction on the University campus.

Tom Spies Gets Rhode Island Annual Award.—Dr. Tom D. Spies, professor of nutrition and metabolism and chairman of the department in the Northwestern University Medical School, received the annual Charles V. Chapin Memorial Award, presented May 11 at the annual dinner meeting of the Rhode Island Medical Society in Providence.

Ricketts Medals Awarded.—The University of Chicago honored two of its alumni in the field of medicine (May 3) when it awards the first Howard Taylor Ricketts award for 1949, Dr. Lowell T. Coggeshall, dean of the division of biological sciences, announced. The award, established by Mrs. H. T. Ricketts as a national honor in recognition of outstanding medical work, was presented annually on May 3, the anniversary of the death of her husband, Dr. Howard Taylor Ricketts, who fell victim to typhus fever while working in the field of typhus in Mexico City.

The first medals were awarded to Dr. Ludvig Hektoen, 5650 Dorchester avenue, the University of Chicago's first chairman of the department of pathology who encouraged Dr. Ricketts in his researches on typhus, and to Dr. Russell Wilder, Rochester, Minnesota, former chairman of the department of medicine at the university and now head of the division of medicine at Mayo Clinic who worked with Dr. Ricketts in Mexico City. After the death of Ricketts, who was the first to see the organisms in Rocky Mountain fever and typhus fever, Dr. Wilder remained in Mexico City to complete Ricketts' work.

The Howard Taylor Ricketts medals were formally presented to Drs. Hektoen and Wilder May 23 at a University of Chicago Clinics meeting at which Dr. Wilder spoke on "Rickettsial Diseases: Discovery and Conquest."

Both distinguished alumni of the University of Chicago, Dr. Hektoen was awarded an honorary doctor of science degree from his alma mater in 1940. He received his doctor of medicine degree from the university in 1887. Dr. Wilder, who holds three degrees from the university, received his bachelor of science in 1907, his doctor of philosophy in 1912, and his doctor of medicine in 1912.

Dr. Hektoen, a professor emeritus at the university since 1935, served as chairman of the department of pathology from 1901 to 1935 and as director of

the McCormick Institute for Infectious Diseases from 1901 to 1940. He was awarded the centennial award of the State Medical Association of Wisconsin in 1941 and the D. S. medal of the American Medical Association in 1942.

Dr. Wilder, professor of medicine at the Mayo Clinic since 1931, was chairman of the department of medicine at the University of Chicago from 1929 to 1931.

Personal.—Ulysses Grant Dailey, Chicago, delivered the Annual Cassasa Memorial Lecture at Harlem Hospital, New York, April 13, on "Problems in Gastroduodenal Surgery." —Dr. Max Thorek was a guest speaker at the Annual Session of the Medical Association of the State of Alabama and presented the Jerome Cochran Lecture in Montgomery on April 20. Dr. Thorek presented "Problems in Acute and Chronic Cholecystitis" supplemented by a motion picture. —Dr. Raymond W. McNealy, associate professor of surgery, Northwestern University Medical School and chief surgeon, Wesley Memorial Hospital, presented a paper on "Peripheral Vascular Surgery" at St. Anthony's Hospital, Rockford, May 4. —Clinics were held May 3-4, for the Michigan Society for Crippled Children by Dr. M. A. Perlstein, Chicago.

EFFINGHAM

Dr. Buckmaster Honored.—Dr. Frank Buckmaster, Effingham, who has recently completed fifty years of medicine, was presented with the Fifty Year emblem and certificate of the Illinois State Medical Society at a meeting of the Effingham County Medical Society, May 19. Dr. Andy Hall, Mount Vernon, made the presentation.

LOGAN

Personal.—Dr. W. W. Coleman has resigned from the active practice of medicine because of illness following fifty years of service in Lincoln.

LIVINGSTON

Fifty Year Member.—Dr. J. G. Barnhizer, Pontiac, was recently awarded the emblem and certificate signifying membership of the Fifty Year Club. The presentation was made by Dr. Joseph T. O'Neill, Ottawa, Councilor of the Second District, who also spoke on "Compulsory Health Insurance." Dr. John L. Keeley, Chicago, discussed "Acute Intestinal Obstruction."

MADISON

Society Election.—Dr. Maurice Woll, Wood River, was elected president of the Wood River Township Medical Society, April 5. Other officers are Dr. Thomas Kelly, Wood River, vice president, and Dr. John LeBlanc, secretary-treasurer, Cottage Hills. The retiring officers are Dr. L. D. Archer, president; Dr. Leo Konzen, vice president, and Dr. W. V. Roberson, secretary-treasurer. — Mr. Fred Seemon, Rochester, discussed "The Prevention of Malpractice Suits" before the Madison County Medical Society, April 7. The society was also addressed recently by Dr. Robert E.

Votaw, St. Louis, on "Sinusitis and Antibiotics." "Carcinoma" was discussed by Dr. John E. Hobbs, St. Louis, before the Society at St. John's Methodist Church, Edwardsville, May 5.

MORGAN

Dr. Oscar Sink, St. Louis, spoke before the Morgan County Medical Society at the Dunlap Hotel, Jacksonville, May 12, on "Colonic Diverticulosis and Polyposis."

PEORIA

The Peoria Medical Society was addressed March 14, by Dr. Benjamin Spock, Rochester, Minn., on "The School Age Child". On March 29, Dr. Warren H. Cole, Chicago, discussed "Nationalization of Medicine" before a joint meeting of the Peoria Medical Society Dental Society, Woman's Auxiliary to the Peoria Medical Society and groups of druggists and related professions. A joint meeting of the Peoria Medical Society; Illinois Trudeau Society and Illinois Chapter, American College of Chest Physicians was addressed April 19, at the Pere Marquette Hotel, Peoria, by Dr. Michael L. Furcolow, Kansas City, Mo., on "Newer Knowledge of Tuberculosis and Histoplasmosis."

ROCK ISLAND

District Meeting.—The Iowa-Illinois Central District Medical Association met at the Fort Armstrong Hotel in Rock Island, March 16, to hear the following: Dr. R. V. Daut, Davenport, Iowa, "Cancer of the Prostate: Aids in Diagnosis, and Advances in Treatment"; Dr. Clarence Dennis, professor, department of surgery, University of Minnesota, "Surgical Treatment Ulcerative Colitis. The speakers were introduced by Dr. A. Walter Wise, Rock Island, and Dr. Samuel P. Durr, Rock Island, opened the discussion.

Dr. Nathan Womack, professor and head of the department of surgery, University of Iowa College of Medicine, addressed the Rock Island County Medical Society, April 12, on "Diagnosis and Treatment of Gallbladder Disease."

Dr. F. E. Bollaert, East Moline, was elected president of the East Moline Rotary Club at its annual meeting, March 31.

SANGAMON

Ray O. Duncan, state director of health, physical education and safety, was given an award in recognition of his services in the interest of health and physical education, at the recent meeting of the Illinois Association for Health, Physical Education and Recreation.

"The Surgical Approach to the Asthma Problem" was the title of an address by Dr. Duane M. Carr before the Sangamon County Medical Society, May 5. Dr. Carr is assistant professor of surgery at the University of Tennessee College of Medicine, Memphis.

TAZEWELL

Dr. Kenneth M. Calhoun, secretary of the Tazewell County Medical Society, discussed "What

Rural Communities Should Know About Socialized Medicine" before the Junior Woman's Club, Mackinaw, on March 22.

WINNEBAGO

"Anti-coagulants" was the title of the address before the Winnebago County Medical Society, May 10. The speaker was Dr. Karl Paul Link, professor of biochemistry, University of Wisconsin.

GENERAL

Appointments at General Hospital.—Appointment of Lt. Col. Robert B. Lewy as executive officer and chief of ear, nose, and throat for the 427th General Hospital has been announced by Col. John B. Youmans, commanding officer of the unit.

Seven other reserve officers also have been appointed to the staff of the 427th General Hospital, a 1,000-bed U. S. Army reserve unit which is sponsored by the University of Illinois College of Medicine.

Other appointments to the staff include Lt. Col. H. J. Lawn, neuropsychiatrist; Major Sidney Black, general surgery; Major Samuel A. Leader, radiologist; Major Robert E. Field, medical general duty; Capt. Lawrence E. Scheving, medical registrar; Capt. Retta Boyd, nurse, administrative; and Capt. Rachel M. Fairbanks, nurse, administrative.

The class "C" type service unit, which was activated at the University of Illinois last fall, will eventually have a commissioned personnel of 55 medical, dental, and administrative officers, and 83 nurses. Training periods are conducted on the second and fourth Mondays of each month for personnel assigned to the hospital.

In event of mobilization, the hospital would be fully staffed in a minimum of 180 days. Filler personnel would be assigned through selective service or from those who hold reserve appointments.

Dr. Winston H. Tucker, Evanston health commissioner, was chosen president elect of the Illinois Public Health Association, April 8. Mr. Baxter K. Richardson, senior administrative officer in the Illinois State Health Department, Springfield, was installed as president.

Special Nurse for Cancer.—The Illinois Division of the American Cancer Society has provided a grant for the Cook County Department of Public Health to assign a nurse to the West District to work mostly with cancer patients in the Berwyn-Cicero area. Miss Virginia L. Davis was given this assignment.

Radio Health Series Receive National Awards.—The Chicago Industrial Health Association's radio health series "It's Your Life" has received three national awards since it was aired October 18, 1948 under the sponsorship of Johnson and Johnson. The first award was presented to Johnson and Johnson at the Waldorf-Astoria Hotel in New York on March 4 and consisted of a bronze medal representing the Annual Advertising Award for 1948 for "Outstanding Contribution to Radio as a

Social Force." On March 30, the City College of New York, through its School of Business and Civic Administration, awarded a plaque "For the Creation of the Outstanding Radio Program of 1948." The radio series will also receive the Award of Merit for "The Creation of the Most Effective Institutionally Sponsored Radio Program During 1948 by a 50-Kilowatt Station." This award is also made by the City College of New York. The series appears on WMAQ, Sunday each week at 3:30 p.m.

Symposium on Cancer.—On May 26, a symposium of cancer was held at the Herrin Hospital, Herrin, sponsored jointly by the Ninth and Tenth Councilor Districts of the Illinois State Medical Society and the Illinois Division, American Cancer Society, Inc. Included among the speakers were Dr. K. Unna, "Chemotherapy of Cancer"; Dr. Arkell M. Vaughn, "Cancer of the Stomach"; Dr. Leo J. Brown and Dr. Frederick Bornstein, "Presentation Clinical Cases"; Dr. Janet Towne, "Pelvic Cancer" and Dr. Jerome Head on "Cancer of the Lung."

Program Director Named for Heart Association.—Appointment to the staff of The Illinois Heart Association of Mrs. Marguerite L. Ingram as Director of Program Development was announced today by Dr. Harry Durkin, Peoria President of the association. A part of her work will be to assemble data pertaining to facilities in the state available for the care of rheumatic fever patients and patients with other heart conditions; to work through various existing state agencies to determine what services are being given, or can be given, in the care and prevention of diseases of the heart and blood vessels; to establish a referral service and directory of resources in Illinois communities; and to secure the cooperation of voluntary agencies, organizations, and civic groups in the heart cause.

The Illinois Heart Association, as the local affiliate of the American Heart Association, is actively engaged in promoting the three-point national program of research, education, and community service in the field of diseases of the heart.

HEALTH DEPARTMENT ACTIVITIES

Dr. Jerome J. Sievers has resigned as chief of the division of communicable diseases, effective May 30. Dr. Sievers will enter private medical practice near Los Angeles, Calif.

Dr. Sievers has been on the staff of the Illinois department of public health since September, 1939, holding his present post since January, 1944. In length of service with the health department he is the fourth ranking medical officer.

Infant and Maternal Death Rate.—Marked decreases in infant and maternal death rates during 1948 provided another bright spot in Illinois' public health picture, Dr. Roland R. Cross, state director of public health said today.

While the total number of live births in the state last year dropped to 181,012 as against 192,247 in 1947, the decline in deaths of mothers and babies was even sharper.

Stillbirths dropped from the 1947 total of 3632 to 3279 in 1948 and deaths caused by premature birth which numbered 1961 in 1947 fell to 1905 last year. Deaths of children under one month of age decreased from 4172 to 3707 during this period. In all, there were 540 less deaths of babies under one year of age in 1948 than in the previous year.

Deaths from maternal causes totaled 202 in 1947, while in 1948 they numbered 164. The 1948 total indicates that only nine maternal deaths per 10,000 live births were registered in Illinois.

The decline of infant and maternal mortality rates is a continuation of a steady downward trend as shown by the fact that maternal mortality is only 31 per cent of the 1940 rate. The stillbirth rate has fallen to 70 per cent of the 1940 figure, while deaths of infants under one month stands at 85 per cent of the rate established eight years ago. Last year, 36 per cent less children died between the ages of one month and one year than did in 1940.

The greatest single cause of infant death was shown to be premature birth which accounted for approximately one-third of all mortalities of children under one year during 1948. Premature death also ranks as the ninth greatest cause of death in all age groups in Illinois.

Combatting this principle cause of infant death, the state department of public health now assists in conducting four centers for the care of prematurely born babies. These are located in Peoria, East St. Louis, Springfield, and Quincy.

Services at these specialized centers which are completely separate from other divisions of the hospitals in which they are located, include specially trained personnel and vehicles equipped with incubators for transportation of the infants.

In areas where hospital facilities are scarce or non-existent, the home delivery nursing service is contributing materially to the survival chances of mothers and infants alike. Through this state-aided services, pre-delivery attention is given the mother by a trained nurse who makes all necessary provisions for the child-birth. The nurse also attends the mother and child for several days following the birth.

The state health department licenses hospital maternity divisions, setting up minimum requirements as to nursing standards and obstetric facilities and equipment. It provides refresher courses in obstetrics for physicians and arrange for courses on specific maternal and birth problems for hospital personnel.

Other established services, including the supplying of blood plasma, classes for prospective parents and rendering advice on problems of nutrition, are important in protecting the health of mother and child.

DEATHS

ANDREW P. BARNAL, Chicago, who graduated at Regia Università degli Studi di Bologna, Italy 1937, died April 17, aged 35.

GROVER C. CHAMNES, Zeigler, who graduated at Barnes Medical College, St. Louis, in 1906, died in Herrin Hospital, April 20, aged 64.

FLOYD E. DUNCAN, Rushville, who graduated at St. Louis College of Physicians and Surgeons in 1922, died in Green Bay, Wisconsin, April 10, aged 48.

THOMAS STEPHEN GREEN, Chicago, who graduated at the College of Physicians and Surgeons, Chicago, in 1895, died February 3, aged 80, of arteriosclerosis and diabetes mellitus.

CHARLES E. HILL, retired, Belleville, who graduated at St. Louis University School of Medicine in 1902, died April 24, aged 72.

OTIS T. HUDSON, Mounds, who graduated at Barnes Medical College, St. Louis, in 1909, died April 12, aged 61, following a heart attack.

JAMES ARTHUR JENNINGS, formerly of Chicago, who graduated at Bennett College of Eclectic Medicine and Surgery in 1889, died April 13, aged 84, in St. Petersburg, Fla., where he had made his home for several years.

JAMES ALBA JOHNSTON, Byron, who graduated at the University of Nebraska College of Medicine in 1894, died April 6, aged 89. He had practiced medicine in Byron over 50 years.

JACOB KOHAN, Chicago, who graduated at Friedrich-Wilhelms-Universität: Medizinische Fakultät, Berlin, Prussia, in 1921, died April 22, aged 57.

JOHN W. MEDLEY, Prophetstown, who graduated at the College of Physicians and Surgeons, Keokuk, Ia., in 1898, died April 10, aged 77. He had practiced medicine nearly fifty years.

ROBERT A. MELENDY, Chicago, who graduated at The Hahnemann Medical College and Hospital, Chicago, in 1906, died April 24, aged 66, of a heart attack. He had been on the staff of Chicago Memorial Hospital for many years.

HENRY JAMES REYNOLDS, Chicago, who graduated at Bellevue Hospital Medical College, New York, in 1883, died April 13, aged 97.

OTTO RAMAN SCOTT, retired, Chrisman, who graduated at Starling Medical College, Columbus, Ohio, in 1889, died April 22, aged 77.

FRED BEN STEINBERG, Chicago, who graduated at Chicago Medical School in 1935, died March 16, aged 38, of acute coronary thrombosis.

JOHN WESLEY TOPE, Chicago, who graduated at Rush Medical College in 1909, died April 30, aged 65.

BENJAMIN J. VOIGT, Elgin, who graduated at the University of Illinois College of Medicine in 1910, died April 22, aged 68.

JOHN FRANK WEST, Belvidere, who graduated at Chicago College of Medicine and Surgery in 1910, died April 28, aged 68. He was a veteran of World Wars I and II.

"For The Common Good"

Television Popular Medium in Health Education.
—A new first was established, May 10, when Dr. Charles D. Krause, instructor in obstetrics and gynecology, University of Illinois College of Medicine, presented a graphic story of prenatal care under the title of "So You're Expecting a Baby."

Lectures Arranged through the Educational Committee of the Illinois State Medical Society;

Youth Week Lectures Arranged For the Chicago Medical Society and the Chicago Board of Education:

Robert Hagan, Roster Elementary School, May 9, Keeping Solid with Health.

Lawrence Breslow, Funston School, May 11, Health and Personality.

Robert E. Cummings, Hale Elementary School, May 11, How Temperamental Are You?

W. W. Bolton, Otis Elementary School, May 11, Building Body, Bones and Beauty.

Alfred D. Biggs, Taylor School, May 11, Keeping Solid with Health.

Robert E. Lee, Edward School, May 12, Child Health.

Harry Leichenger, Grant Elementary School, May 13, Health and Personality.

S. Sinclair Snider, Gallistel Elementary School, May 13, Keeping Solid with Health.

Paul K. Anthony, Graham Elementary School, May 13, Health and Personality.

Eugene T. McEnergy, Brainard School, May 13, Teen Age Tips on Health.

Franklin Corper, Prussing Elementary School, May 11, Keeping Solid with Health.

Arthur Rosenblum, Juggman School, May 11, Keeping Solid with Health.

Other Lectures arranged by the Educational Committee:

R. E. Davies, Spring Valley, Logan School PTA, Princeton, May 5, on Preschool Medical Examinations.

James H. Hutton, Tuberculosis League in Quincy, May 9, Steps Necessary to Eradicate Tuberculosis, and Kiwanis Club, Quincy, May 9, Legislative Program of the Committee to Eradicate Tuberculosis.

George V. LeRoy, Chicago, Leukemia Research Foundation at Congress Hotel, May 21, Current Studies in Leukemia.

Ben Park, director, Radio Division, Chicago Industrial Health Association, Chicago Pediatric Society, May 24, "The Inside of 'It's Your Life'."

John L. Reichert, Chicago, Mount Carroll Public

School in Mount Carroll, June 23, on School Health Services.

Lectures Arranged Through the Scientific Service Committee of the Illinois State Medical Society:

William B. Serbin, Chicago, McHenry County Medical Society in Crystal Lake, May 19, Obstetrical Emergencies.

Herbert E. Landes, Chicago, Northwest Chapter American Academy of General Practice in Chicago, May 20, Physiologic and Pathologic Basis of Kidney Disease.

William S. Hoffman, Chicago, Northwest Chapter, American Academy of General Practice, in Chicago, June 17, on Fluid Balance, Pre and Postoperative Management.

Joseph H. Kiefer, Chicago, St. Clair County Medical Society in East St. Louis, September 1, on Carcinoma of the Prostate.

A CHALLENGE

Medicine has advanced more during the last twenty-five years than during the preceding century, mostly through methods of precision, specific preventive and curative agents, and in improvements in our hospitals. All of these things take trained minds and hands, and they cost money.

People will spend to the limit for non-essentials but will not provide in advance for illness, the only large expense which is unpredictable for individuals or families. When the inevitable hardship arrives, wage-earners will not condemn their own improvidence—but many will hate the medical profession and accuse it of creating unmanageable expenses.

Experience the world over has demonstrated that any full-service plan falls except on an indemnity basis. Otherwise people call for innumerable house visits, go to the doctors' offices too many times, demand eyeglasses, teeth and other prostheses beyond limits of sensible propriety.

Let us not make the mistake that England did—negativism and poor press relationships. Their people got the impression that the medical profession opposed State Medicine for selfish financial reasons. Consequences are now well demonstrated. Our full cooperation and demonstration of willingness to effect

superior service at the level of large national accounts may save our country a similar catastrophe.—*Rocky Mountain Medical Journal*.

MELANOMA

Melanoma is one of the most vicious of tumors. It is surely fatal to the untreated patient and to the patient in whom distant metastases exist before treatment is begun. Nor is it a rare tumor; one melanoma is reported for every 35 cases of skin cancer. But in spite of its frequency and its malignancy, the melanoma is not so refractory as to defy proper therapy, provided the lesion is recognized early in the course of its development.

Most melanomas arise from benign moles which undergo malignant change. Others are malignant at their first appearance. There is no way to predict which benign moles are destined to develop into melanomas. However, those that are exposed to continuous trauma and irritation are the ones most likely to become malignant. The mole that suddenly appears, or one that begins growing, changing color, ulcerating, or bleeding must be regarded with suspicion. A pigmented halo around a mole may indicate malignant spread beneath the skin.—*Texas Cancer Bulletin*.

PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, Department Editor



URTICARIA CAUSED BY HEAT, EXERTION AND EXCITEMENT

Harry Sigel, M.D., New Haven, Conn. In ARCHIVES OF DERMATOLOGY AND SYPHILOLOGY. Feb., 1948. Vol. 57, No. 2, Page 204.

Urticaria caused by heat, exertion and excitement is an uncommon dermatologic disease;

Twenty-two patients with urticaria caused by heat, exertion and excitement were observed among American Soldiers in Japan. The large number seen here is considered to be unusual. Before arriving in Japan, which is in the temperate zone and is decidedly cool in the autumn, all the patients (except the one from Florida) had spent the previous summer months in the Philippine Islands, where the weather is hot. This represented a rather abrupt drop in climatic temperature of their environment and is probably of etiologic significance except in the 3 patients who already had symptoms before leaving the Philippine Islands.

The eruption was characterized by pinhead-sized wheals, with or without erythema, and accompanied with urgent itching, prickling and burning sensations. Intradermal tests with histamine phosphate in a dilution of 1 to 1,000 showed no evidence of histamine sensitivity. Gastric analysis before and during attacks showed

Treatment in general was unsatisfactory.

Histamine phosphate desensitization seemed to be of some value in a few cases. Symptoms could be relieved with any cooling agent. Patients with milder symptoms improved with any form of treatment, while most of the patients with severe symptoms remained resistant to treatment.

FIBROSITIS

James Cyriax, M.D. Physician to the Department of Physical Medicine St. Thomas's Hospital, London. In THE BRITISH MEDICAL JOURNAL, July 31, 1948. No. 4569, Page 251.

Primary Fibrositis:

Controversy has gone on for many years about the nature and identity of the different disorders included by common consent under this heading. The existence of fibrositis is affirmed by most clinicians, denied by most pathologists, but in the absence of an alternative explanation for the symptoms and signs purely negative views have carried little weight.

Treatment Of Primary Fibrositis — The underlying principle is simple; to secure reduction of the intraarticular displacement causing the symptoms.

Neck — This is usually easy, whether the patient has pain in the neck, the scapular area, or

(Continued on page 44)

The Importance of Protein Adequacy In Diabetes Mellitus

It appears in the light of recent experience that the daily protein requirement of the diabetic has been underestimated and calls for an upward revision.

The success obtained in diabetic retinopathy from the use of high protein diets emphasizes the deleterious possibilities of hypoalbuminemia in this metabolic disease.

In view of the excellent results observed from a high protein intake, in many forms of hepatic disease, a dietary rich in protein is suggested as a therapeutic measure in the management of liver enlargement, one of the frequent complications of diabetes.¹ Since impaired liver function reduces the efficacy of insulin, prevention of liver enlargement by a liberal allowance of protein in the daily diet of the diabetic appears an important factor in the control of this disease. With an estimated 2,000,000 diabetics in the United States² every benefit achieved in this field makes itself felt on a truly large scale.

Meat is an outstanding source of protein in the dietary of the patient with diabetes mellitus for these reasons: It is notably rich in protein, from 17 to 20 per cent of its uncooked, and from 25 to 30 per cent of its cooked weight. The protein of meat, regardless of cut or kind, whether fresh, cured, or canned, is biologically complete. All meat is of excellent digestibility—from 96 to 98 per cent. Furthermore, meat ranks with the best sources of B vitamins, potassium and phosphorus, all of which are essential factors in the metabolism of carbohydrate.

¹Nutrition in Diabetes, Nutrition Rev. 6:257 (Sept.) 1948.

²Diabetes and Arteriosclerosis in Youth, Editorial, J.A.M.A. 135:1074 (Dec. 20) 1947.

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Physical Medicine (Continued)

the upper limb; a few sessions of manipulation seldom fail to secure reduction.

Thorax — In some simple cases one manipulation may result in full reduction; but eventual relapse is common. The difficult cases are very difficult, and it is easy to make the patient worse. If attempted manipulative reduction — even during traction — fails, rest in bed is indicated.

Backache — Recovery follows a few sessions of attempted manipulative reduction in about half of all cases. Rest in bed relieves some others but may lead to aggravation.

Lumbago — Two-thirds of all cases are considerably, one-third fully, relieved by manipulation.

Sciatica — Manipulation is particularly apt to be effective in the elderly; in patients under the age of 50 it is likely to succeed in only one case in four.

Traumatic Fibrositis — This results from overuse or a single strain. Perhaps the best example is a tennis elbow.

Infectious Fibrositis — It is characterized by fever, severe pain in the abdominal and thoracic muscles, and speedy recovery.

Parastic Fibrositis — The disease comes on some ten days after eating infected pork. Active contraction of the affected muscle increases the pain.

SUMMARY

Primary fibrositis, both local and generalized is an imaginary disease. The symptoms erroneously ascribed to this condition are all the result of articular disorders (largely internal derangement) at the spinal joints.

Secondary fibrositis (traumatic, infectious and parasitic) is a real entity.

POLIOMYELITIS IN CHILDREN: A CLINICAL STUDY

Clifford K. Kobayashi, M.D. and Joseph L. Kehoe, M.D., Iowa City. In THE JOURNAL OF THE IOWA STATE MEDICAL SOCIETY. Sept. 15, 1948. Vol. XXXVIII, No. 9, Page 402.

The purpose of this paper is to report clinical experiences with poliomyelitis in children who were seen in the Department of Pediatrics of the State University of Iowa during a ten-year period from Jan. 1, 1937, through Dec. 31, 1947.

Treatment during the acute phase was by various means. Roughly, the entire group was divided into two sub-groups; those treated with and those not treated with Kenny packs. Those treated with packs received the Kelly technic with a few modifications. Table 7 shows the divisions of types into methods of treatment. A total of 194 children received the modified Kenny and a total of 184 children received the non-Kelly regimen. It is interesting to note that more children treated with packs had residual muscle weakness than those who were not treated with packs. An erroneous conclusion can be drawn and should be guarded against because of the relatively shorter follow-up period for those who received the modified Kenny regimen.

Between 30 and 40 per cent of the children who had evidence of muscle weakness at the time of admission eventually recovered without residuals regardless of how they were treated. Hot packs were not curative, and were not necessarily superior nor inferior to other methods. It was a clinical impression that packs, more than any other measure, afforded comfort to the children, especially those with muscle tightness or spasm associated with pain. Furthermore, the children received greater attention during treatment with packs than with other measures.

PHYSICAL METHODS OF TREATMENT IN PSYCHIATRY AND THEIR IMPLICATIONS TO GENERAL MEDICINE

William Sargant, M.B. M.R.C.P. D.P.M. Visiting Professor of Neuropsychiatry, Duke University School of Medicine. In THE NORTH CAROLINA MEDICAL JOURNAL, August, 1948, Vol. 9, No. 8, Page 367.

With a few notable exceptions, such as the malaria treatment of general paresis, the possibilities of specific treatments for the psychoses were, until a few years ago, regarded by psychiatry with cautious pessimism. At the same time psychiatrists were perhaps over-optimistic about various forms of psychotherapy for the neuroses. The last ten years have reversed the picture to a considerable extent.

Electric Shock Therapy: Just before the war electric convulsion therapy — the giving of a

(Continued on page 46)



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1. Walter, R. I.; Goldberger, M. A.; and Lapid, L. S.;
New York State J. Med. 48: 1159 (May 15) 1948.

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Physical Medicine (Continued)

series of electrically induced epileptiform convulsions — had been introduced. It was hoped that this might supplant insulin in the treatment of schizophrenia. Published figures, and the clinical observations of those of us who have been able to use and compare both methods over some years now, show that this is not the case. Electroshock treatment, however, is a useful supplement to insulin in schizophrenia, and the best results are obtained if these two treatments are combined when patients do not respond to either individually.

REFRIGERATED AUTOGENOUS SKIN GRAFTING

Adrian E. Flatt, M.D., M. B. Camb, M.D. From the Plastic Surgery Unit, Ministry of Pensions Hospital, Stoke Mandeville. In: *THE LANCET*, August 14, 1948. No. 6520, Page 249.

Though the present series is small, it is felt that this simple method of skin storage and application is justified.

The results tend to substantiate the views of other writers that refrigerated grafts possess an increased vitality, and the "infected" cases in this series show that it is economical to apply stored skin-grafts to areas to which fresh grafting is not usually carried out because of bacterial flora.

The patients have in many instances been saved repeated operations and had their hospital stay shortened by having skin available at the different times at which the recipient area became suitable for grafting.

CORRECTIVE PHYSICAL REHABILITATION — AN EFFECTIVE APPROACH

J. L. Rudd, M.D., Reubin J. Margolin, M.A., Charles L. Rose, M.A. In *THE MILITARY SURGEON*, August, 1948, Vol. 103, No. 2. Page 125.

This paper describes the special methods used in a physical rehabilitation setting, which proved to be more effective than a routinized conventional approach. Ingredients in this program were:

1. Motivation through patient participation.
2. Informality.
3. Free expression of patient including expression of hostility and resistance.
4. Use of personal relationship factors.

(Continued on page 48)

“no signs
of renal irritation
were encountered”¹

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1. Lehr, D.: Presented at The Scientific Exhibit, American Medical Association, June 21-25, 1948.

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Physical Medicine (Continued)

5. Use of imaginative and sometimes improvised material in athletic activities and dramatizations.

The general aim was to create a therapeutic atmosphere which facilitated the response of each individual within the group. Negative factors in patients' behavior were given an opportunity for expression and thus prevented from blocking maximum recovery. In a minority of cases, resistances were so deeply rooted in fears, such as, return to combat duty and loss of dependency status, that only limited successes could be achieved.

The emotional component ever present in the play between patient and therapist was recognized, understood, and utilized. This factor of relationship, common to all disciplines allied under the aegis of rehabilitation, points to the need of an integrated program, from which the individual patient can receive optimum benefit.

AFTERCARE OF THE AGED SICK

E. N. Thomson, M.D., M. Curran, M.D., M. G. Glasg, M.D., M. B. Glasg, D.P.H. In THE LANCET, August 14, 1948, No. 6520, Page 241.

In 1946, among the elderly people outside hospital, only 51 out of 1001 were willing to go to a home for the aged, even though the conditions were described in rosy colours; yet 301 were willing to go to hospital. On this occasion only 10 out of 318 would have gone to such a home, the remaining 308 giving a very definite refusal. The reason is not far to seek. When hospital admission is suggested, the patients know that they will probably be discharged in a few weeks after good nursing, a rest, and general care, apart from any medical or surgical treatment required. They know that when they leave hospital they will be returned to their own home, their own corner of the world, which has been kept open for them by relations or by the local authority. But they feel that there is a finality about going to a home for the aged. They will never return to their own fireside, and if they leave the home they will have no place to go to, because their houses will have been given to others.

Many of those admitted to hospital required only general medical or nursing care, impracti-

(Continued on page 52)

Candy... TO ADD SATIETY VALUE

EVEN TO A DRAB MEAL



HUMAN nutrition presents many phases not encountered in experimental studies. The laboratory animal, driven by hunger, will eat and thrive on any food substance that is adequately nutrient. Taste and variety and meal satisfaction are of little moment in such nutritional studies.

In human nutrition, the joy of eating, and especially the satisfaction of having eaten well, play an important role. Frequently, though physiologic hunger has not come about, it is the pleasant memory of the last meal that engenders the appetite.

To add satiety value to the meal, candy may well serve as its last course. Even an otherwise drab meal gains much when topped off by a piece or two of candy.

Confections in the manufacture of which milk, butter, eggs, fruits, and nuts or peanuts are used, are particularly suited for this purpose. This is true, not only because of their universal taste appeal, but also because they contribute small amounts of many essential nutrients.

THE NUTRITIONAL PLATFORM OF CANDY

1. Candies in general supply high caloric value in small bulk.
2. Sugar supplied by candy requires little digestive effort to yield available energy.
3. Those candies, in the manufacture of which milk, butter, eggs, fruits, nuts, or peanuts are used, to this extent also—
 - (a) provide biologically adequate proteins and fats rich in the unsaturated fatty acids;
 - (b) present appreciable amounts of the important minerals calcium, phosphorus, and iron;
 - (c) contribute the niacin, and the small amounts of thiamine and riboflavin, contained in these ingredients.
4. Candies are of high satiety value; eaten after meals, they contribute to the sense of satisfaction and well-being a meal should bring; eaten in moderation between meals, they stave off hunger.
5. Candy is more than a mere source of nutrient—it is a morale builder, a contribution to the joy of living.
6. Candy is unique among all foods in that it shows relatively less tendency to undergo spoilage, chemical or bacterial.

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Physical Medicine (Continued)

cable in their home surroundings, but possible in a convalescent home; they did not need examination or treatment by a specialist, but could have been treated by a general practitioner, had their social condition been better. They would be pleased to go to such a recovery home, even for several months, because they know they would eventually come back to their own house. We suggest that, when planning for the old people's welfare, local authorities should consider the provision of such homes, with nursing care and with medical attention readily available. This would help to relieve some of the pressure on hospital beds in favour of those who require skilled treatment, and would diminish the number of elderly people entering the public-assistance institutions.

The nursing in these recovery homes does not call for a full staff of trained nurses; a few such skilled people would be necessary, but most of the staff could quite well be assistant nurses or general helps. Such work could, with

advantage to all, be included as part of a nurses training. This would teach young nurses how to care for the elderly; it would be of advantage to the old people, and it has a third advantage. During the years of training young nurses would, for a period, live at the seaside or in the country — a great boon to a girl living in a hospital in industrial surroundings.

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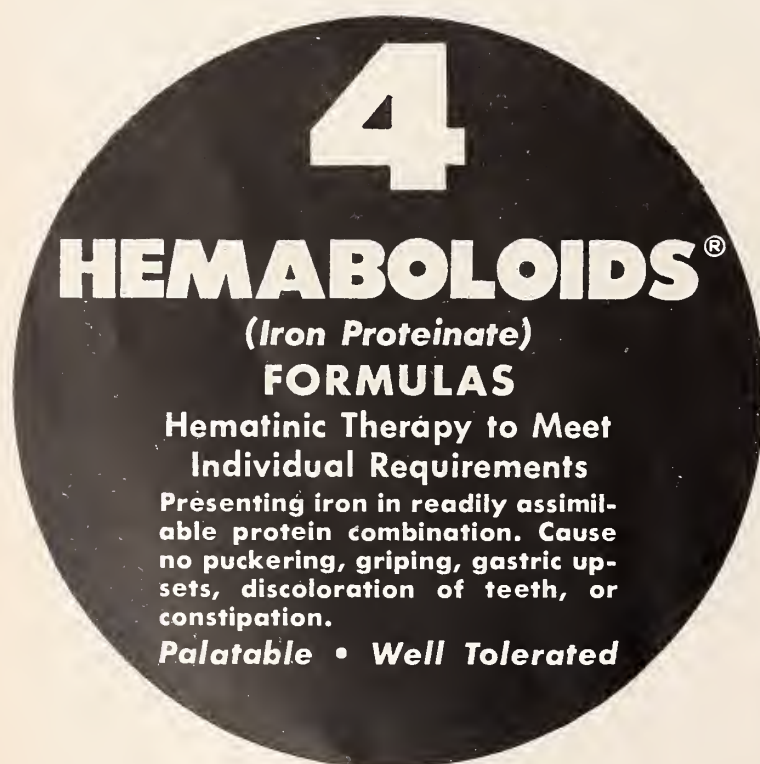
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PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, Department Editor



THE ROLE OF PHYSICAL MEDICINE IN THE LIFE HISTORY OF THE AMPUTEE

Mandell Shimberg, M.D., Chief, Physical Medicine Rehabilitation, Veterans Administration, New York. In ARCHIVES OF PHYSICAL MEDICINE, 29:11:719, November, 1948.

To anyone who has come into contact with many amputees throughout the years, it is entirely obvious that for the most part many of their problems have been delegated to the limb maker, and the limb maker is entirely unfitted to handle more than a small proportion of these problems. It might be said that the surgeon should concern himself more with the total rehabilitation of the amputee. However, in the light of much experience, one must look farther afield to find someone who is willing to take hold of this problem of amputee rehabilitation, both of the upper and of the lower extremity.

For a considerable time it has been my opinion that the burden of amputee rehabilitation from its very inception must rest squarely with the physiatrist. Apart from actual surgery and the mechanics of limb construction, the problem is essentially in the realm of physical medicine. Physical medicine must play an important role in bringing the amputee back to a satisfactory way of life.

Psychologic preparation is, in my opinion,

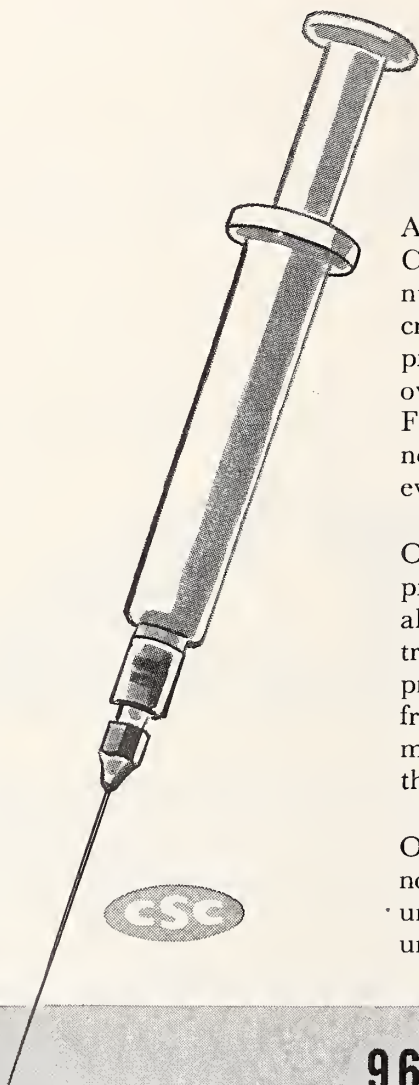
one of the most important and one of the most often neglected phases of such rehabilitation. It involves treating the entire person rather than any one part.

Preventive measures are of the greatest importance. It is easier to prevent deformities than to correct them. Good bed posture should be insisted upon as well as the very early inception of extension-adduction exercises for above knee amputees and quadriceps exercises for below knee amputees.

Here the very important problem of stump conditioning is begun. The situation is paradoxical. On one hand, one seeks shrinkage of the stump, which is atrophy of tissue, and on the other hand one attempts development of the muscle fiber structure for good function. Atrophy appears quickly and is coincident with bed rest and the period of disuse. If a stump is left in disuse for a protracted period the activating stump-lever muscles undergo fatty degeneration and the muscle fiber structure is reduced in contractility. Yet, the by-products of surgery and a large amount of superfluous tissue must be got rid of. This is accomplished by planned pressure. Under proper care the skin will increase in thickness, the circulation will be improved and the muscles will increase

(Continued on page 52)

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Physical Medicine (Continued)

in tone and volume. The stump will lose its abnormal sensitivity. Bandaging accomplishes two purposes: (1) It supports the circulation, and (2) it brings the stump down to a shape suitable for the fitting of a prosthesis. The old goal of a tapered conical stump no longer applies if the new type suction socket is used; in such a case a well muscled cylindrical stump is a better base for the prosthesis. The utmost care and intelligence should be employed in stump bandaging, especially in above knee amputees. It should, whenever possible, be applied by a competent, trained therapist. Within ten days after operation unless there are complications the patient should be entirely turned over to the physiatrist and his helpers for further treatment. The surgeon has done his job, and it is now up to the physiatrist to carry through. It is in this stage that one must be especially careful regarding the indiscriminate use of wheelchairs, which in case of above knee amputees, may predispose to the development of postural abduction—external rotational contractures of hips, and in case of below knee amputees, to flexion contracture at the knee. It is good practice in this stage to mobilize the scar by friction massage. Whirlpool baths may be used to advantage in the treatment of terminal stump edema, which, in many cases, can be attributed to improper bandaging.

After about ten to fourteen days following operation, the patient is ready to enter the pre-prosthetic phase of his rehabilitation. This phase is by no means routine and varies greatly in different cases. The first duty of the physiatrist is to make a complete physiatric evaluation of the patient. The object, at this time, is to establish the need for, as well as the quality and quantity of, therapeutic exercise. No routine set of exercises can be prescribed, for there is no consistent pattern of muscle weakness. We must, of necessity, develop an accurate knowledge of each patient's body mechanics. Postural alignment of the body as a whole must be tested, and the plumb line test is of great value. Knowledge of all contractures in the vicinity of joints must be appraised. Furthermore, the muscle groups concerned with actuating the stump lever as well as other muscle groups should be tested for weaknesses.

One must correct defects in body alignment, establish muscle balance and assure normal range of joint motion. It is important that attention be directed only to those muscles which require strengthening, to those joints which require further mobilization and to those defects in body mechanics which require correction. During this period attention should be paid also to maintaining the general body muscle tone.

There are several components of good walking with a prosthesis: balance and muscle coordination, smooth walking rhythm and length of steps. The patients must learn weight distribution and how to adjust the travel pattern of the prosthetic foot, so as to duplicate that of the normal foot. He must develop proper kinesthetic sense, so that at all times he knows where the artificial limb is. Furthermore, he must learn to achieve a uniform stride. He must be warned at the onset to go slowly with the wearing of his prosthesis or edema of the stump and pressure sores will develop.

It will be necessary after a period of training to evaluate his gait. Briefly, there are four important parts in the analysis of this gait: (1) weight bearing on the prosthesis, (2) motion of step with the normal leg, (3) weight bearing on the normal leg and (4) motion of step with the prosthesis.

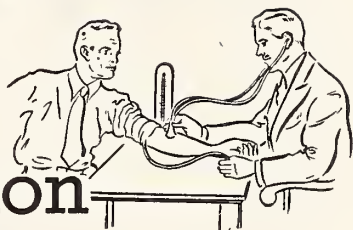
PHYSICAL MEDICINE IN ORTHOPEDIC SURGERY

Frank R. Ober, M.D., Boston. In ARCHIVES OF PHYSICAL MEDICINE, 29: 10:628, October 1948.

In general, the orthopedic surgeon has long recognized the value of physical therapy measures in the rehabilitation of the physically handicapped.

It must be remembered that the physiology of deformity is an important factor in loss of function and that when a deformity has been corrected one has still a job to do in improving the function of the corrected part so that the patient will receive the utmost benefit. In the case of joints a good rule to observe is that, given a poor joint plus poor muscles which control that joint, the joint represents a real disability and will continue to do so unless something is done about it. It may be necessary to accept poor

(Continued on page 54)



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Physical Medicine (Continued)

joint structure, but it is not necessary to accept poor muscle function, provided the innervation or a disease has not destroyed the controlling muscles. Physical therapy measures, used with judgment, will help to bring these muscles back to normal, and once this has been done a liability has been turned into an asset.

An imperfect joint that is used like a perfect joint usually will deteriorate if there is not musculature to protect it and help its function.

No joint must be allowed to sustain a load beyond its function, since to do so will increase the atrophy of its muscles which always occurs after injury or disease; it should be borne in mind also that a surgical procedure is an injury, and it too must be combated in any planned after-care.

Any physical measure which produces lasting pain must be abandoned or modified, since pain induces protective muscle spasm, interferes with the neuromuscular mechanism and contributes to an increase in muscle atrophy. Stretching procedures to relieve contractures may cause

temporary pain, but if they are properly performed the pain should not last over an hour and will not be harmful. Pain which continues for twenty-four hours must be considered as deleterious.

Pain and swelling are combated with ice packs, cold compresses or heat. Some persons do not tolerate heat; in fact, it may make the condition worse. Heat and cold must be used judiciously. Extremes of either are too often bad treatment.

No joint is cured by being cooked all day and all night. Heat is used for a specific purpose — that is, to improve the circulation and relieve spasm. The prolonged use of heat is very liable to cause stasis which defeats its purpose.

Massage is a valuable asset in the management of orthopedic disabilities. It improves the circulation but does not remove muscle atrophy. When properly used, it helps to relieve muscle spasm and pain. Massage should be gentle and should never hurt. That type of massage which digs deep into muscles to remove so-called knots is more apt to be harmful than beneficial and too

(Continued on page 56)



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Physical Medicine (Continued)

often results in more pain and increased muscle spasm, thereby defeating its purpose.

Massage alone will not restore function and should be considered as an aid to other physical measures. It is contraindicated in very acute lesions attended with pain and muscle spasm. It is a good physical therapist who knows when not to use massage.

Passive motion or exercise has a very limited field. It should be gentle and guarded. It is useful in moving joints within the limits of discomfort and helps to restore the patient's joint sense. It helps in the relief of muscle spasm, and again should be done gently, and it is indicated in joint or periarticular conditions in which there are adhesions plus a little motion. It does not remove muscle atrophy.

Electric stimulation is sometimes useful in stimulating seemingly paralyzed muscles after cerebral accidents. It does not restore power in total paralysis. It has been shown that it will prevent rapid muscle degeneration after a nerve has been severed.

Active exercises to restore muscle tone probably are the most valuable of all physical therapy aids, and, given a single choice of all the procedures, it is best to choose active exercises as being the most helpful and most productive in restoring function to an injured joint.

1. Simple muscle contractions are adapted to all convalescent patients, to the aged and to any single muscle or to a group of muscles.

There is a good deal of discussion in the current literature on getting surgical patients out of bed early, but nothing is said about how to get convalescent medical patients out of bed early. When a person has been in bed for a short time, all his muscles lose tone and strength. As time goes on, increasing muscle atrophy is added.

The greater the loss of muscle tone and strength and the atrophy, the longer it takes the patient even to get about. The orthodox manner of treating the convalescent is to let him begin sitting up at intervals. Later he is told to dangle his legs over the side of the bed. Still

(Continued on page 58)

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Each tablet contains:

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Calcium Pantothenate.....	2.5 milligrams
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Suggested dose: One to two capsulettes three times a day at mealtime or as directed by physician. Available in boxes of 100 capsulettes.

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Each fluid drachm (one teaspoonful) contains at least:

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Physical Medicine (Continued)

later he is allowed to sit up in a chair for short periods, which then are increased; then someone comes along and with the help of others he is made to stand up and finally he is told to walk, which he does, usually assisted when he finds himself staggering down the room. All this is bad and takes much time.

The time element may be materially shortened, the convalescence made more rapid and hospital beds freed earlier, relieving what is now a serious situation in overcrowded hospitals. Muscle contractions can be taught to anyone who has even a small degree of intelligence. The simplest thing to do is to tell the patient to make his quadriceps muscles tight on both legs. Some intelligent patients seem to be stupid at first, but with a little patience success will come in a few minutes.

These contractions or muscle settings are done slowly, gently and firmly, beginning with a few at a time in order not to fatigue the muscle performing them, every half hour and gradually increasing until three hundred are done daily. Once this has been learned, the patient is taught to do the same thing to his calf and buttock muscles. It is important to begin with the leg muscles, because a rapid restoration to normal function in them means that he will walk sooner.

After the patient has learned to do all this, it is easier for him to learn to do similar exercises for his back and abdominal muscles. The back and posterior neck muscles are contracted by arching the neck and back at regular intervals. The abdominal and anterior neck muscles are strengthened by raising the head and shoulders 4 or 5 inches from the bed. Deep breathing exercises help the abdominal, chest and diaphragm muscles.

The arms can be exercised in the same way, beginning with the hands. The patient makes a slow fist, then flexes, extends, rotates, adducts and abducts the wrist. The fingers are released with some tension, separated, approximated and dorsiflexed. The next step is flexion and extension of the elbow and supination and pronation of the forearm. From this one proceeds to the shoulder, which is abducted, flexed, extended, hyperextended, rotated, elevated and adducted in the manner described for the hand. Once

(Continued on page 60)

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Phenobarbital	1/4 gr.
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Extract Belladonna	1/6 gr.
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Calcium Carbonate	24 gr.
Magnesium Oxide	10 gr.
Magnesium Trisilicate	15 gr.
Dried Aluminum Hydroxide Gel	10 gr.

Supplied in four ounce containers. Each Al-Si-Cal Tablet contains 1/4 teaspoonful Al-Si-Cal powder.

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Physical Medicine (Continued)

the patient has learned the whole program, he can combine leg, back, neck, chest, abdominal and all arm exercises in one effort for all instead of in separate groups.

This form of exercise is well adapted to the old, whose chief disabilities are going up stairs, arising from a chair and walking, the principal reason being that the quadriceps and gluteal muscles do not function well. This form of muscle setting is especially adapted to strengthening the muscles, and it also helps the peripheral circulation.

2. Active and passive or assisted active motion should follow the period of muscle settings when the muscles have a normal contour and tone. These are well adapted to patients with proliferative arthritis and may be carried out by the use of balanced traction in the early stages, to be followed by manual movements of an assistant plus active contractions by the patient. The passive movement should not cause any pain — i.e., the arc of motion must be within the range of discomfort.

3. Active exercises should be performed at first with gravity eliminated and later, as the muscle function is restored to normal, against gravity. and finally against resistance. It is senseless to try to perform exercises against resistance if it is impossible, e.g., to extend the knee against gravity.

4. Weight-bearing exercises should never be allowed until all fluid has disappeared from the knee joint, there is no thickening of the synovial membrane and no pain and the quadriceps has normal tone, normal contour and normal strength. The vastus internus is the slowest portion of the quadriceps to recover.

Painful shoulders resulting from injuries, bursitis or tendinitis of the suprascapular muscle nearly always show atrophy of the deltoid muscle. Long after the shoulder has recovered from its original condition it may be painful because of the atrophy of the deltoid. This muscle may be restored to normal by the form of exercising just mentioned.

Many lame backs continue to be lame or there are recurrent attacks because no one has taught the patient to restore his corset muscles, the gluteus maximum and the abdominals. Forward

(Continued on page 64)

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1. Carroll, G., and Allen, H. N.: J. Urol. 55: 674 (1946). 2. Merricks, J. W.: West Virginia M. J. 44: 157 (1948). 3. Scudi, J. V., and Duca, C. J.: J. Urol. (to be published).

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Physical Medicine (Continued)

bending exercises are prescribed too often. Forward bending with legs straight is a favorite position for securing a lame back and should not be indulged in. Forward bending in the sitting position is not so bad, but no active exercise of the back should be done until the gluteus and abdominal muscles have tone, contour and strength, all of which may be secured by muscle setting followed by exercises against gravity.

No joint should be exercised if the exercise causes pain that lasts.

No weight-bearing should be allowed until the physiology of the joint is restored.

CONSERVATIVE TREATMENT OF SCOLIOSIS IN SELECTED CASES

Col. E. M. Smith, M.C., U.S.A., Chief, Physical Medicine Service, Walter Reed General Hospital, and Lieut. Col. C. D. Shields, M.C., U.S.A., Resident, Physical Medicine Service, Walter Reed General Hospital, Washington, D. C. In ARCHIVES OF PHYSICAL MEDICINE, 29:11: 709, November 1948.

1. Scoliosis is a lateral rotary curvature of the spine. Idiopathic scoliosis is that type of which no cause is discovered to explain the condition.

2. Scoliosis, without structural changes, may be treated in a conservative manner.

3. Muscle testing, the application of a brace, the development of muscles by a planned, continuous program and gradual withdrawal of the brace are recommended.

4. The program must be within the fatigue tolerance of the patient and the capacity of muscle reserve.

5. Conservative therapy may well be utilized to prepare patients with scoliosis for spinal fusion.

6. Conservative therapy of lateral curvature of the spine must be judged by time, diligent application of the method and honest evaluation of the results.

The responsibility for planning and providing adequate hospital facilities for the tuberculous is a public, not a private obligation. A. W. Fiske, (Ohio State Representative) Ohio Pub. Health, Sept., 1948.

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PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, Department Editor



STUDIES IN LOW BACKACHE WITH PERSISTENT MUSCLE SPASM

Judith P. Price, M. A., Research Associate, Laboratory Of Neurophysiology, Washington University, Margaret H. Clare, B.S., R.P.T., and Frank H. Ewerhardt, M.D., St. Louis. In ARCHIVES OF PHYSICAL MEDICINE, 29: 11: 703, November 1948.

Patients with acute and with chronic back pain (resulting from simple muscular strain, joint irritation, arthritis or psychogenic disturbances) have been studied through three methods: (1) localization of painful regions by repeated mappings of palpable painful foci; (2) removal of pain, either by treatment of the acute pain or by correction of abnormal patterns of activity in the chronic stage; (3) analysis of movement as a guide to the previous methods using electromyographic recording of simple routine test positions and movements.

It has been found that the areas of pain or tenderness migrate from one muscle group to another or from one part of a muscle group to another region of the same group. This shift of pain seems to be associated with the abnormal patterns of muscular activity developed in an attempt to avoid or relieve pain.

Electromyographic studies during test movements have given objective evidence of such patterns of activity and of the relative amounts of activity in various muscle groups in relation

to pain as compared to normal subjects. Relief of the abnormal tensions in the muscles by correction of the abnormal patterns of activity may assist greatly in alleviating discomfort and preventing recurrences of pain.

THE CARE OF PARAPLEGIC PATIENTS FROM THE VIEWPOINT OF INTERNAL MEDICINE

H. Ivan Sippy, M.D., Consultant in Internal Medicine, Veterans Administration Hospital, Hines, Ill. In ARCHIVES OF PHYSICAL MEDICINE, 29:11: 715, November 1948.

1. Unusual difficulties are encountered in the diagnosis of intercurrent illnesses among paraplegic patients because of their disturbed visceral sensation and motor function and their impaired muscular reaction to pain and palpation. The customary presence of other disorders, such as decubitus ulcers and urinary tract infections, makes for further confusion.

2. Treatment of intercurrent diseases is hampered by the same factors and, in some instances, by the mechanical limitations imposed by paraplegic disability.

3. Prevention of illnesses is furthered by the good state of nutrition which prevails in this group of patients. An extensive review of laboratory data shows that blood protein levels, erythrocyte counts and hemoglobin determina-

(Continued on page 52)



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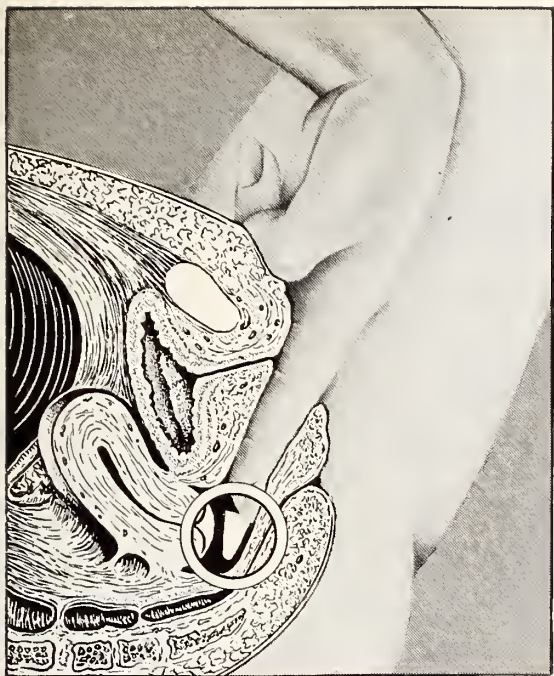


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1. Walter, R. I.; Goldberger, M. A.; and Lapid, L. S.:
New York State J. Med. 48: 1159 (May 15) 1948.

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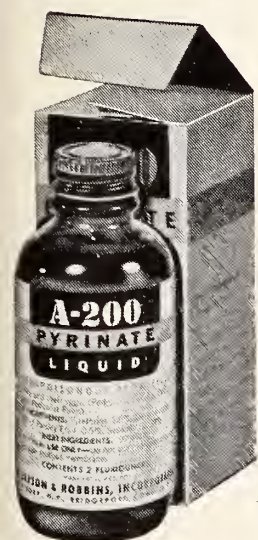
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Physical Medicine (Continued)

tions compare favorably with the normal values.

4. Investigational studies directed toward clarification of some of the problems encountered by the internist are contemplated. In an effort to select suitable subjects for such investigation, a survey of already recorded data is now in progress. From this survey it is becoming evident that gastric analysis, tests for visceral pain, orthostatic variations in blood pressure and gastrointestinal motility in paraplegic patients merit further study.

SOME INDUSTRIAL ASPECTS OF RHEUMATISM

By Thomas Ferguson, M.D. D.Sc. F.R.C.P. Ed. F.R.F.P.S.G., F.R.S.E. Professor of Public Health, University of Glasgow. In The Practitioner, Sept. 1948, No. 963, Vol. 161, Page 170.

"The need for expansion of treatment facilities."

If the amount of invalidism from rheumatism is to be reduced, there must be an expansion of treatment facilities in industrial centres, with, in particular, the provision of treatment facilities available at times which permit of their use by workpeople without encroachment on working shifts. The centres in which treatment can be obtained for chronic rheumatic conditions in the evenings are not nearly so numerous as they ought to be. Pressure on limited existing facilities for physiotherapy is so great that it is often difficult for the industrial worker to secure treatment directed to the relief of pain, especially in cases in which spectacular cure is no longer possible. Some physiotherapists, hard pressed for time, are reluctant to deal with these cases; yet facilities for the relief of pain may make all the difference between capacity for work and enforced idleness.

ACUTE RHEUMATISM

As already indicated, acute rheumatism, unlike the more chronic forms of the disease, is not a major contributor to incapacity for work among insured population, nor does it fluctuate with occupational group to the same extent as the other. But acute rheumatism is, none the less, of considerable industrial importance, and not nearly enough attention is given to skilled vocational guidance designed to see that the young person with a history of acute rheumatism

(Continued on page 54)

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(ammonia dermatitis)

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Physical Medicine (Continued)

seeking to enter industry is, from the first, trained for work consistent with his capacity. It too often happens that young people with gross rheumatic heart disease are allowed to drift into work involving heavy physical demands which can only lead to early breakdown. In this connection it is worth recalling that some employments eminently suited to the physical and mental capacities of these youngsters are more or less closed to them by the operation of superannuation schemes, sufficiently drastic in their pre-employment requirements to exclude potential workers with rheumatic heart disease from employment of a kind most likely to afford them success and happiness in life.

OSTEOARTHRITIS AND ITS TREATMENT

By Ernest Fletcher, M.D. M.R.C.P. Physician, Arthritis Clinic, and Lecturer in Rheumatic Diseases, Royal Free Hospital, London: Physician Queen Mary's Hospital for the East End, London; Physician, Arthur Stanley Institute, Middlesex Hospital, London. In The British Journal of Physical Medicine, Sept. Oct. 1948, Page 136. Physiotherapy

Adjustment of posture obviously is important, for joints put at a mechanical disadvantage will always tend to show degenerative changes after a suitable lapse of time. Physiotherapy is most useful. For the pain described in the table some form of heat seems to be best, and perhaps diathermy gets nearer to the site of the trouble than does any other form. In the case of osteoarthritis of the hips very intensive treatment is needed — at least one hour a day, 5 days a week — and this is the only form of physiotherapy which affects the condition. Weakness and wasting of muscles are usually treated by non-weight bearing exercises particularly of the active type, and some people use faradism, although, to my mind, this is hardly justifiable on a physiological basis. Particularly tender spots in the joints, if fairly well localized, are probably best treated, in the field of physiotherapy, by erythema doses of ultra-violet irradiation given with Kromayer lamp. The acute inflammatory episodes are undoubtedly best treated by diathermy.

Gentle stretching of the capsule under an anaesthetic sometimes relieves the pain for a

(Continued on page 58)

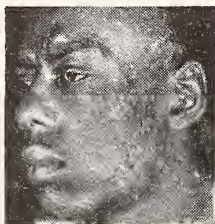
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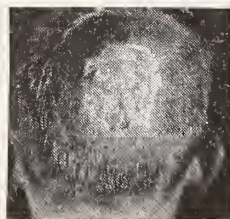
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Physical Medicine (Continued)

considerable period. Surgery has a place in the treatment, especially in the hip-joint, for which a vitallium cup arthroplasty is a popular operation, Magnuson in 1941 described the operation of Joint debridement.

HEMIPLEGIA

In The British Journal of Physical Medicine, Sept. October, 1948, Vol. 11 No. 5. Page 129.

It is reasonable to assert that, if a patient with hemiplegia fails to receive adequate treatment, one must attribute the deficiency to lack of facilities rather than to lack of interest.

Benefit is to be expected from the use of heat therapy and muscle re-education. By means of the latter procedure the patient learns how to relax the spastic muscles and how to re-establish co-ordination. Exercises for the upper limbs should be designed to relax the flexor muscles and to strengthen the extensors. At first, single joints should be exercised; later on, more com-

plex movements are allowed. Success is all the more likely to be achieved with the aid of occupational therapy. When contractures or adhesions limit movement at the shoulder-joint pulley exercises serve to increase the range of motion.

Lowman recommends the use of the Hubbard tank for re-educative exercises in water. The exercises are of 30 minutes' duration, and are given from 3 to 6 times a week.

Nowadays, prolonged recumbency for hemiplegia is regarded with disfavor. Early ambulation offers the surest hope of securing effective re-education, but in selecting the right moment to initiate this radical change in posture the physician is faced with one of the most difficult problems in the whole range of medicine.

He: "When does a girl pass the adolescent stage?"

Him: "When her voice changes from no to yes."

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PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, Department Editor



ALTERNATING PRESSURE ALLEVIATES BED-SORES

W. James Gardner, M.D., Cleveland Clinic, Cleveland, and Ruth M. Anderson, R.N., Cleveland Clinic, Cleveland. In *THE MODERN HOSPITAL*, Volume 71, pg. 72, Nov. 1948.

Bedsore result from death of tissues owing to inadequate nutrition. The most important factor responsible for the inadequate nutrition is slowing or arrest of the capillary circulation resulting from compression of the blood vessels between the patient's bony prominences and the mattress. This occurs more readily if the blood pressure is low or if the patient's weight is concentrated in small areas because of a lack of cushioning subcutaneous tissue.

A second important factor responsible for inadequate nutrition is poor quality of blood being brought to the tissues. A third important element responsible for inadequate nutrition is increased metabolic demands by the tissues resulting from fever, from local inflammation or from trauma. A fourth factor, as pointed out by Munro in cases of spinal cord injury, is loss of the local cutaneous vascular reflexes.

Described in the article is an alternating pressure mattress which is constructed of a flexible waterproof plastic material. It is placed on top of an ordinary mattress and then the bed is made up as usual except that since the

mattress is waterproof it does not need a rubber sheet and is easily washed after each patient's use. The mattress is well tolerated; most patients rather enjoy the sensation of movements beneath them. It produces no friction of the skin, but merely a gentle compression and release. The alternating pressure mattress has been in use in the Cleveland Clinic Hospital since July 1947.

None of the thirteen patients having decubiti could turn himself and their position was turned only every three to four hours. The physical condition of all these patients was generally poor. The patients stated that they received comfort from the air mattress whenever they were in a condition to comment rationally.

BRINGING REHABILITATION TO THE VOLUNTARY GENERAL HOSPITAL

By: Maxwell S. Frank, M.D. and Michael B. Miller, M.D. Beth Israel Hospital, New York City. In *HOSPITALS, THE JOURNAL OF THE AMERICAN HOSPITAL ASSOCIATION* November, 1948, Vol. 22, No. 11, Page 37.

The future plan of therapy provides for an organized daily schedule for patients assigned to physical medicine, to be followed throughout the day. Activities will be listed for each

(Continued on page 52)

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Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60;
Broc. Soc. Exp. Biol. and Med., 1934, 32-241; N. Y. State Journ. Med., Vol. 35, 6-1-25, No. 11, 590-592.

Physical Medicine (Continued)

patient, depending upon his status of convalescence. Provisions for occupational therapy will also be made as soon as practicable. We realize that rehabilitation cannot be successful if the patient is exposed to it only for 30 or 60 minutes a day. Only a daily graduated plan on a full-time schedule can be completely effective. The department of rehabilitation will function, as it should, on a fulltime basis.

In line with modern practices, an important function of the department will be an organized service for the scientifically directed early ambulation and convalescence of the post-surgical patient. This is in the best interests of both hospital and patient and will result in a more rapid recovery, a shorter hospital stay and a greater availability of beds.

A program must depend for its success, to a large extent, upon its acceptance by the medical profession. Acceptance, in turn, depends upon the educational activities in this direction sponsored by the hospital. These should include lectures and demonstrations to the house staff, participation in general medical conferences in the hospital, participation in conferences of the specialties where cases common to both specialties are involved, the conduct of conferences within the department itself, and ward and classroom lectures to the school of nursing. Publication of research on current problems is also an important function in the operation of the department. We also anticipate a program in the clinical training of students from the departments of physical education of local universities.

Finally, as the department develops and its importance to the community increases, a more effective integration will be sought between the social service department of the hospital and the various voluntary organizations interested in rehabilitation.

It is hoped that this report may foster interest in the development of medical rehabilitation programs in other voluntary general hospitals.

TREATMENT OF FRACTURES IN GENERAL PRACTICE

By L. C. Powell, M.D. Beaumont, Texas. In *Texas State Journal of Medicine*, October, 1948, Vol. XLIV No. 6, Page 440.

The limb is generally not capable of its full

use when the bony fragments have just united in good position. Young patients may return to work in a few weeks. It is necessary to allow older persons, especially those with a fracture of femur or tibia, from two to six months longer before hard work can be undertaken. In spite of good position of the fragments, in spite of exercise of the limb during the period of immobilization, the muscles have become weak and the lower leg swollen. If physiotherapy is carried out in the right manner and begins only when the bones have properly united, no damage can be done, and the injured man, particularly when he is insured, has a feeling that something is being done for him. Massage and passive movements employed too early interfere with the rest necessary for healing and cause pain.

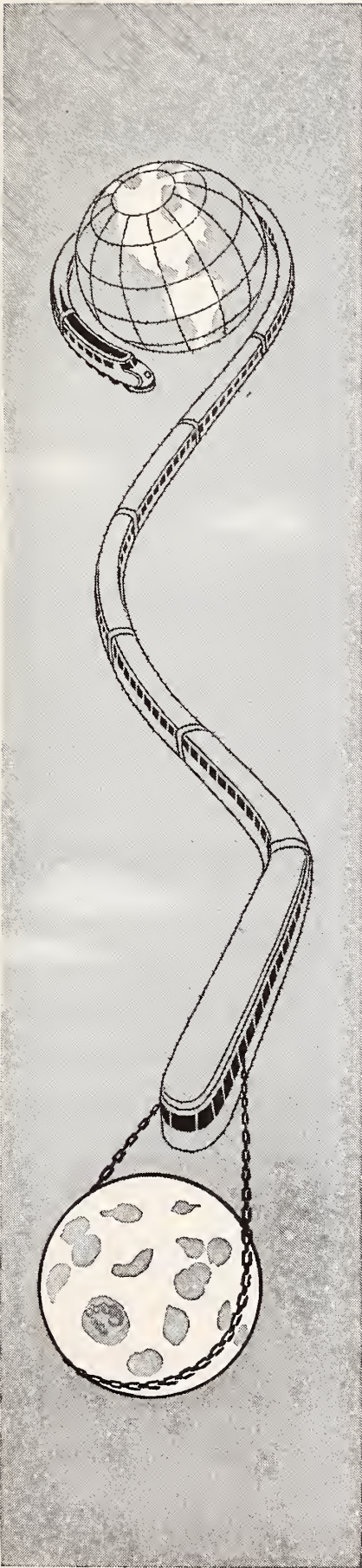
CURRENT THERAPEUTIC PROCEDURES IN CORONARY DISEASE

William S. Middleton, M.D., Madison, Wisconsin. In *ROCKY MOUNTAIN MEDICAL JOURNAL*, 46:1:27, January 1949.

With the warning of the symptoms and signs of coronary insufficiency frank coronary thrombosis may be postponed or averted. On the other hand this accident in all of its classical features may occur without premonitory signals of distress. Conversely the atypical and silent forms may baffle the most astute diagnostician. The therapeutic targets are specific, namely, control on pain and hypoxia, sedation, protection of the myocardium, improvement of the coronary blood flow, prevention of embolism and of propagation of the thrombus, preservation or restoration of normal conduction and maintenance of minute volume output of the heart (control of cardiac decompensation). Absolute bed rest, with mental as well as physical relaxation, is the first indication in the treatment of acute coronary occlusion.

The convalescence from a coronary accident frequently is tedious. Recognizing every grade of myocardial handicap, minor episodes admittedly escape notice or progress to an uneventful convalescence without unusual protection. On the other hand, serious degrees of disability to fatality may succeed initially inconsequential manifestations. The prognosis of coronary thrombosis is beset by many pitfalls. Accord-

(Continued on page 54)



Slow-Down Strike on the Blood Transit

ENOUGH CORPUSCLES IN THE
BODY TO STRETCH FOUR TIMES
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A BLOOD TRANSIT SYSTEM—
AND WHEN HEMOGLOBIN IS DOWN
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Physical Medicine (Continued)

ingly conservatism is the best policy. Physical rest in bed must be enjoined for six weeks in the average subject. Compromises in the reduction of this period may be made in the victims of lesser attacks under carefully controlled conditions. Conversely, a certain number with severe reactions must remain in bed for several months to insure the establishment of a maximal collateral circulation and myocardial reserve. Physical inactivity can be carried to inordinate extremes. The period of recuperation may be reached when carefully graduated exercise becomes the key to more adequate myocardial recovery. Mental rest likewise must be insured.

THE PHYSIOLOGIC EFFECTS OF PHYSICAL THERAPY

George Morris Piersol, M.D., M.A.C.P., Philadelphia, Penna. In *ANNALS OF INTERNAL MEDICINE*, 30:1:69, January 1949.

During the past ten years interest in physical

medicine has increased markedly. In spite of this physicians continue to show considerable skepticism as to the advantages of this form of therapy. This attitude is due in no small measure to the belief that physical medicine does not rest upon a sound physiological basis. The purpose of the following remarks is to point out that the most useful and commonly employed procedures in physical medicine, i.e., the use of various forms of heat and cold, massage, and therapeutic exercise, depend for their effectiveness upon well established physiological reactions. A thorough understanding of these reactions is as essential to the successful use of physical therapy as is correct diagnosis, accurate anatomic knowledge of the involved part, and familiarity with various technics.

HEAT

Heat, in some form, applied generally or locally, represents the therapeutic measure most frequently used in any department of physical medicine. A summary of one year's experience

(Continued on page 56)



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1. Horton, B. T., Ryan, R. E. & Reynolds, J. L., *Proc. Staff Meet. Mayo Clinic*, 23:105, Mar. 3, 1948.
2. Friedman, A. P., *N. Y. State JI. of Med.* (in press).
3. Ryan, R. E., *Postgraduate Medicine* (in press).
4. Hansel, F. K., *Annals of Allergy* (in press).

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Physical Medicine (Continued)

in a general hospital showed that of 23,345 treatments given in the department of physical medicine heat was a feature in 44.3 per cent of cases. Next to heat came massage, 34 per cent, and then therapeutic exercise, 15.4 per cent. The value of heat in the management of many conditions, based upon clinical observation, appears to be well established. In spite of the widespread employment of heat as a therapeutic agent and extensive physiological studies on the effects of heating, the complex changes that are induced when human beings are subjected to heat are still imperfectly understood.

Observations recently carried out by Horvath and Botelho at the University of Pennsylvania furnish data on some physiological reactions that are brought about when individuals are placed under the abnormal stress of heat, regardless of whether it is used in its positive aspect, as a hot bath, or in its negative aspect, as a cold bath.

In the course of a discussion of the physiological effects of heat Horvath states that two factors must always be considered in heat therapy, (1) the amount of heat successfully applied into the tissues, and (2) the extra amount of heat produced in the tissue as a consequence of the oxidation processes that have been accelerated by the heat applied. These factors deserve careful consideration when heat therapy is contemplated.

MECHANO-THERAPY

Under mechano-therapy are included massage, therapeutic manipulation and all kinds of exercise. In spite of careful studies that have been carried out by such investigators as Penberton, Coulter, Mennell, and others, much remains to be done to bring about a complete understanding of the physiological effects of massage.

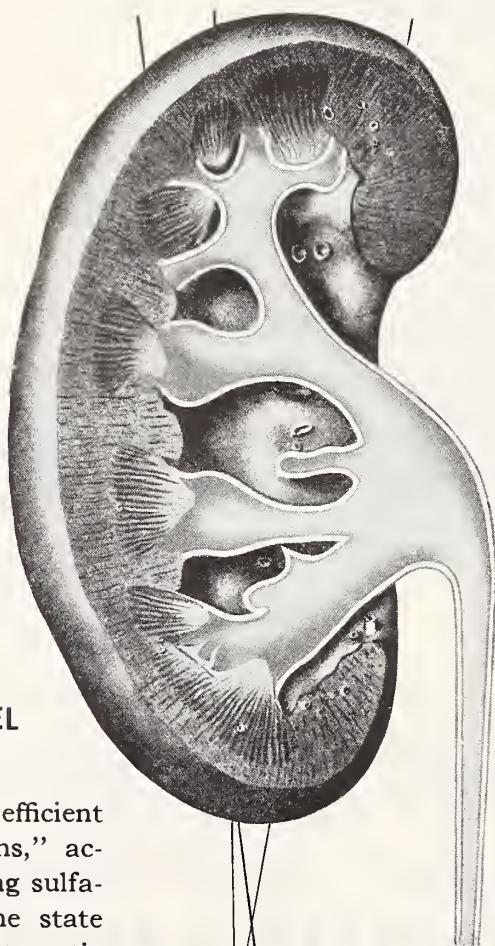
Massage stimulates the contraction of both voluntary and involuntary muscles. Various reflex phenomena result from the stimulation of sensory receptors in the skin as well as in the deeper nerve trunks. With the application of external pressure it is possible to displace the contents of hollow viscera and of accessible glands and their ducts. Collections of inflammatory exudate in skin and muscles may be dissipated by massage. As pointed out by Scull, massage involves the application of the

(Continued on page 58)

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Wm. L. Brown, M.D., Director

Wm. L. Brown, Jr., M.D., Associate

Physical Medicine (Continued)

stimulus of pressure to tissues. It has been shown that in normal subjects massage has no significant effect on pulse rate, blood pressure or oxygen consumption.

THERAPEUTIC EXERCISE

The interest of the physiatrist centers chiefly about corrective exercise, which has been defined as the scientific application of bodily movements in the treatment of disease or malfunction. The subject has attained increasing importance of late because of the prominent role which remedial exercise plays in the extensive reconditioning programs now established by various agencies throughout the country. Therapeutic exercise has as its primary purpose not so much the development of muscle power, but rather the acquisition of ability to use muscles effectively in carrying out essential acts and skills.

In spite of the enormous amount of work that has been devoted to the changes incident to muscular contraction, there is still considerable divergence of opinion among competent students of the subject.

The physiological fact that the redevelopment of muscle power, even in markedly atrophied muscles, depends upon high resistive, low repetition exercises led DeLorme to devise a system of heavy resistive exercises. For this purpose he has designed a series of weights which can be attached to various parts of the body so that they can be lifted by voluntary muscular effort. According to his program, one day each week the patient exerts maximal power to lift a suitable weight once. On the other days he lifts a weight which is no heavier than that which is maximum for ten repetitions. Striking results in improved muscle power have been obtained by this procedure.

Hellebrandt and her associates confirmed an older observation that unilateral heavy resistive exercise not only increases the strength of the exercised limb but brings about a similar concomitant effect on the contralateral unexercised limb. They found that the determining factor in this so-called cross education was the amount of effort expended rather than the duration of the exercise. This cross education may prove a useful therapeutic tool in cases in which voluntary control is unilaterally defective or in

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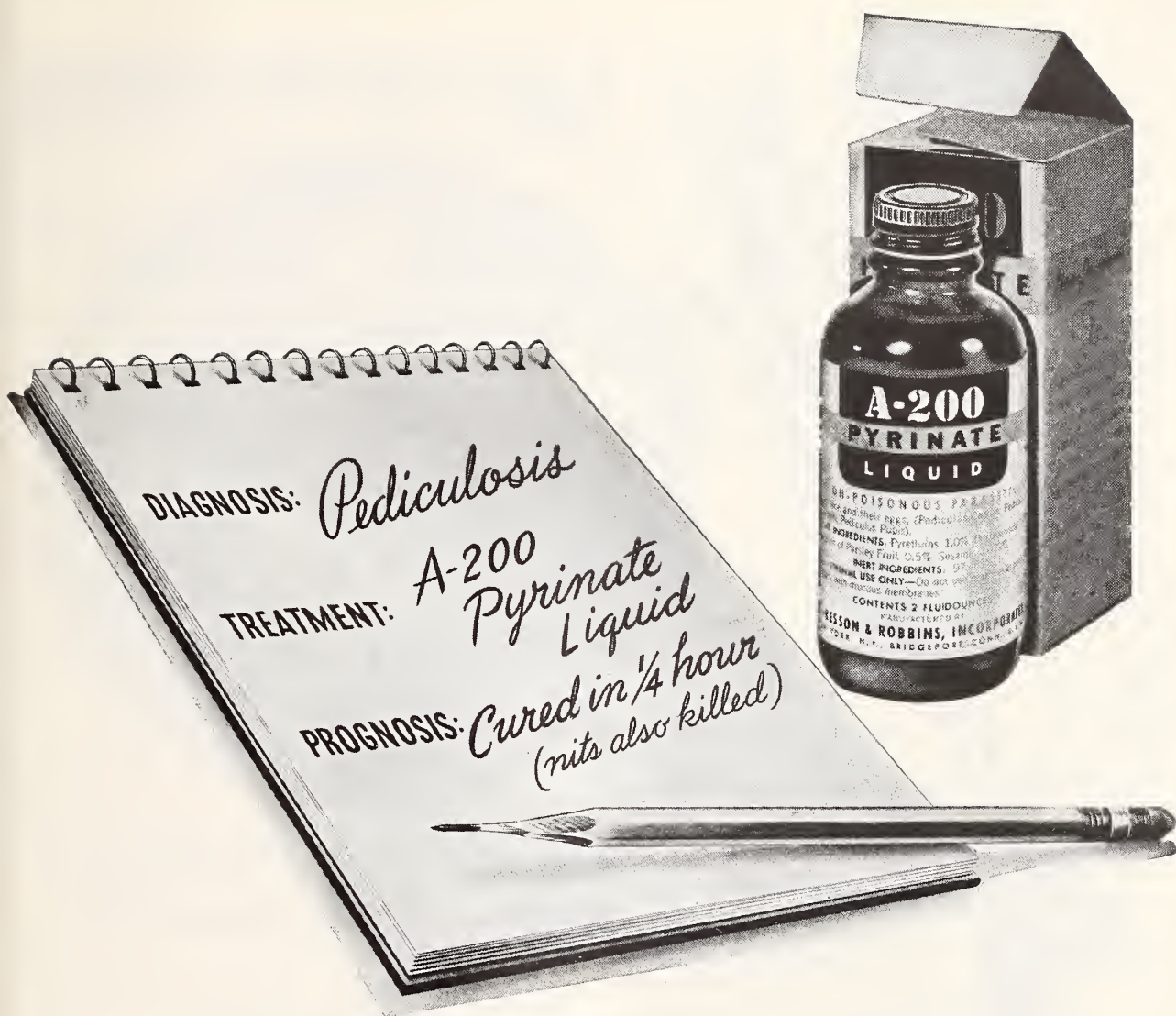
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(Continued on page 60)



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Physical Medicine (Continued)

which contralateral muscle groups are temporarily inaccessible because of immobilization.

THE CARE OF HAND INJURIES

Prepared by the American Society for the Surgery of the Hand. In *RHODE ISLAND MEDICAL JOURNAL*, 32:1:36, January 1949.

After-treatment consists of:

- (1) Elevation and rest of the hand.
- (2) Noninterference with initial dressing for a sufficient time to permit healing, unless evidences of suppuration develop.
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- (5) Restoration of function in affected parts of the hand by directed *active* motion as early as is consistent with full healing and preservation of the repair of damaged structures.

PHYSICAL MEDICINE RESIDENCIES FOR ARMY INTERNS

In *THE BULLETIN OF THE U. S. ARMY MEDICAL DEPARTMENT*, 9:1:34, January 1949.

The Surgeon General announces the availability of a limited number of positions for assistant residents in physical medicine at three of the the Army teaching hospitals — Letterman General Hospital, Walter Reed General Hospital, and Fitzsimons General Hospital. These will be held open for a limited period for interns, now on duty in Army hospitals, who desire to enter this field on completion of their internships. The residencies have been approved by the American Board of Physical Medicine and the Council on Medical Education and Hospitals of the American Medical Association. In addition to the three years of formal residency training required by the Board, there is provided the opportunity for clinical training in the diagnosis and treatment of disease by physical means. This includes the technics of rehabilitation of the physically disabled. In the second or third year of training the resident will be expected to conduct a research project in some phase of

(Continued on page 64)

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Particularly valuable when the patient has difficulty in utilizing adequate amounts of protein from natural food sources such as may occur at times in pregnancy and lactation, gastrointestinal disorders, convalescence, diarrhea in children, chronic malnutrition, and in aged patients.

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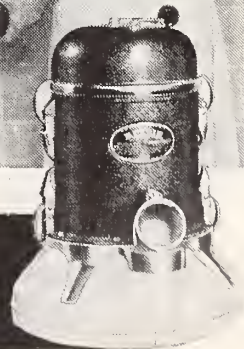
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Physical Medicine (Continued)

the field. Those interested in such a residency should communicate immediately with the chief, Physical Medicine Consultants Division, Surgeon General's Office, or discuss the subject with the chief of the physical medicine service in their particular hospital.

POLIOMYELITIS IN FAMILIES ATTACKED BY THE DISEASE

I. Distribution of Virus in Stool and Oropharynx of Members in Households: Herbert A. Wenner, M.D., Assistant Professor of Pediatrics and Bacteriology and William A. Tanner, M.D., Resident in Pediatrics, Kansas City, Kansas. (From the Departments of Pediatrics and Bacteriology, and the Hixon Memorial Laboratory, University of Kansas, School of Medicine.) In THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES, 216:3:918:258, September 1948.

1. A study of 5 families in which poliomyelitis appeared provided evidence of a widespread distribution of virus in members of these households.

2. There were 24 members in these house-

holds; 17 had poliomyelitis virus in their intestinal discharges; in 7 virus was detected in the throat.

3. Poliomyelitis virus was detected in stool samples of 13 children, and 4 adults. Virus was present in the throat of each of 5 children and 2 adults.

4. On the basis of history of onset of illness and isolation of poliomyelitis virus in members of 4 households it is suggested that virus was seeded in respective members at a common source.

In the treatment of pulmonary tuberculosis, complete bed rest is the foundation upon which the physician builds. In addition to this, collapse therapy of various kinds is used to provide local rest to some portions of the lung to initiate healing of the diseased process, to correct an unfavorable mechanical situation such as the presence of a cavity in the lung parenchyma, or to speed up the healing process. With the addition of collapse therapy one may shorten the time of complete bed rest, allowing the patient to be ambulatory and return to a productive occupation at an earlier date. Harold Guyon Trimble, M.D., Am. Rev. Tuberc., May, 1948.

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PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, DEPARTMENT EDITOR



A STUDY OF FASCICULATIONS

Harry A. Teitelbaum, M.D., Ph.D., and H. Waldo Bird, M.D. In *THE JOURNAL OF NERVOUS AND MENTAL DISEASE*, 108:6:455, December 1948.

The well-intrenched concept that fibrillations and fasciculations have their origin in anterior horn cells that are undergoing an irritative degeneration has not withstood the onslaught of recent investigation very well. From the studies of Langley and Kato (1914-15) it became evident that fibrillations occur spontaneously in muscle on the fourth or fifth day following section of the nerve supply. Denny-Brown and Pennybacker (1938) confirmed the above, and suggested that these fine, rhythmical twitches could be due to sensitization of the denervated muscle fibers to the normal acetylcholine content of the circulation. These authors proposed that these fine movements be designated as fibrillations in contradistinction to the coarser types seen clinically, and to which they refer as fasciculations. Tower (1939) is, however, not certain that this distinction is justified. And more recently, Forster, Borkowski and Alpers (1946) have concluded that "fasciculations and fibrillations probably represent the same phenomenon, the only difference being that fasciculations are synchronized fibrillations occurring in the same motor unit." In this paper the term, fasciculation, will be used in a broad sense, referring to all muscle twitches recorded in the electromyogram.

The incident of fasciculations in cases of progressive muscular atrophy, triorthocresyl phosphate poisoning and diffuse encephalomyelopathy of a nonspecific nature, has been studied. Spinal anesthesia and peripheral nerve block had no effect on the fasciculations in the cases of progressive muscular atrophy, and in that of encephalomyelopathy; but in the case of triorthocresyl phosphate poisoning, spinal anesthesia had a striking inhibitory effect. Intocostrin successfully abolished the fasciculations present in the three types of cases, while prostigmine increased the fasciculations in the two cases of progressive muscular atrophy. The observations reported are integrated with the findings of previous investigators in this field, and the possible mechanisms by means of which several specific drugs act, are elaborated on to some degree. All of the data are employed in an effort to elucidate the problem of the site or sites of origin of fasciculations.

THE CONTROL OF CIRCULATION STASIS BY THE ELECTRICAL STIMULATION OF LARGE MUSCLE GROUPS

Frank L. Apperly, M.D., D.Sc., F.R.C.P. and M. Katharine Cary, A.B., Instructor in Pathology, Richmond, Virginia. In *THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES*, 216:4:919:403, October 1948.

The various causes of circulatory failure in—
(Continued on page 42)



The national total of undiagnosed or "unknown" diabetics may run from a million to two or even three.^{1,2} Modern treatment, when promptly initiated, can do much to prevent metabolic decompensation and to minimize diabetic complications. Therefore, the clinical revealment of diabetes mellitus at an early stage is essential.

Thus, "all patients who present themselves to the physician for an examination should have a routine urine examination."³ In this phase of practice, the advantages of *Clinitest*[®] tablets for urine-sugar analysis are considerable.

Clinitest is dependably accurate, yet it takes only a few seconds to perform. The test is simple—no external heat need be applied; interpretation is by direct color comparison. *Clinitest* is convenient both for the doctor's office routine and for the diabetic patient's prescribed sugar-level checkups.

(1) Joslin, E. P.: *Postgraduate Med.* 4:302 (Oct.) 1948. (2) Kemper, C. F.: *Rocky Mountain M. J.* 45:1092 (Dec.) 1948. (3) Pollack, H.: *New York Med.* 4:15 (Dec. 5) 1948.

Clinitest

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and Physical Rehabilitation

Any marked loss of weight in the nonobese patient deprives the organism of a considerable amount of protein, apt to lead to severe protein deficiency. A weight loss of 5 Kg. does not appear large as such. Yet it is estimated that it may well entail a simultaneous loss of as much as 900 Gm.—or two pounds—of tissue protein,* taken from the scant protein stores of the body, from the muscles, liver and other viscera. Prevention of such large protein losses or rapid replacement of depleted protein stores is imperative. Nitrogen balance must be re-established as quickly as possible to promote local healing and general recovery in many surgical conditions, in severe burns, in metabolic disturbances, and following overwhelming infections.

Meat as the primary source of protein affords a number of special advantages in the period of actual dietotherapy as well as during recovery and rehabilitation. It is of excellent digestibility so that it can be easily eaten two or three times a day to satisfy increased protein requirements.

The appetizing taste appeal encourages simultaneous intake of other valuable foods, especially desirable in the presence of anorexia.

All meat is notably rich in biologically complete protein, from 17 to 20 per cent of its uncooked and from 25 to 30 per cent of its cooked weight. Furthermore, meat ranks with the best sources of B-complex vitamins and iron, important nutrient factors in physical rehabilitation.

*Meyer, K. A., and Kozoll, D.D.: Progress in the Treatment of Carcinoma of the Stomach and Esophagus, South Dakota J. Med. & Pharm. 2:39 (Feb.) 1949.

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American Meat Institute
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Physical Medicine (Continued)

clude loss of blood volume, failure of cardiac, muscle or respiratory pumps and the loss of vascular tonus. Although a vast amount has been written concerning most of these, it is only in recent years that we have begun to appreciate the role of the muscle pump, particularly as regards stagnation of blood in the lower limbs and the relation of this condition to post-operative shock and thrombosis with pulmonary embolism.

A simple method of aborting or preventing the peripheral circulatory failure of gravity shock has been described. The method is now being applied in this hospital: (a) in the treatment of traumatic shock, and (b) as a preventive of post-operative shock, venous stasis and thrombosis. To date, some 60 patients have been treated, but these numbers are too small to warrant conclusions. It is hoped, however, that the method will be tried and reported in other hospitals.

RECENT ADVANCES IN RESEARCH AND TREATMENT OF MULTIPLE SCLEROSIS

I. Mark Scheinker, M.D., In THE OHIO STATE MEDICAL JOURNAL, 45:1:27, January 1949.

Multiple sclerosis was considered by its first describers, of almost a century past, as something of a curiosity. With advancement in knowledge of the disease and with progressive refinements in diagnosis, it is recognized today as one of the commonest among neurologic diseases.

Three new avenues of research, crystalized during the last decade, are briefly summarized.

A clinical study of a series of 40 cases of multiple sclerosis yielded the following observations:

1. The large majority of cases of multiple sclerosis show a marked degree of arterial hypotension. Repeated measurements yielded systolic and diastolic pressures far below normal values.
2. A striking myasthenia-like fatigability of the skeletal muscles is an extremely frequent complaint of most patients. Almost without exception, they seem to have some degree of muscle power in the early morning hours, becoming increasingly weak and tired throughout the remainder of the day. The rapid loss of muscle

power may, in some cases, be easily recovered after a short period of rest. Difficulties in walking, speech disturbance, tremor and locomotor ataxia, as well as difficulties in swallowing, become more pronounced in the afternoon and evening hours.

3. A striking influence of morale and emotional factors upon the extent and severity of symptoms is evident. A large proportion of cases of multiple sclerosis are in a permanent state of anxiety and tension, and show a dire need for help and guidance. The initial success of any "new" treatment applied to patients afflicted with multiple sclerosis is based primarily upon this craving for guidance and a marked susceptibility to suggestive psychotherapy.

On the other hand, there is a striking correlation between emotional instability and the severity of a given symptom or symptoms.

All these clinical-pathologic observations were taken into consideration in formulating the procedure of treatment. The therapeutic measures advocated may be divided into:

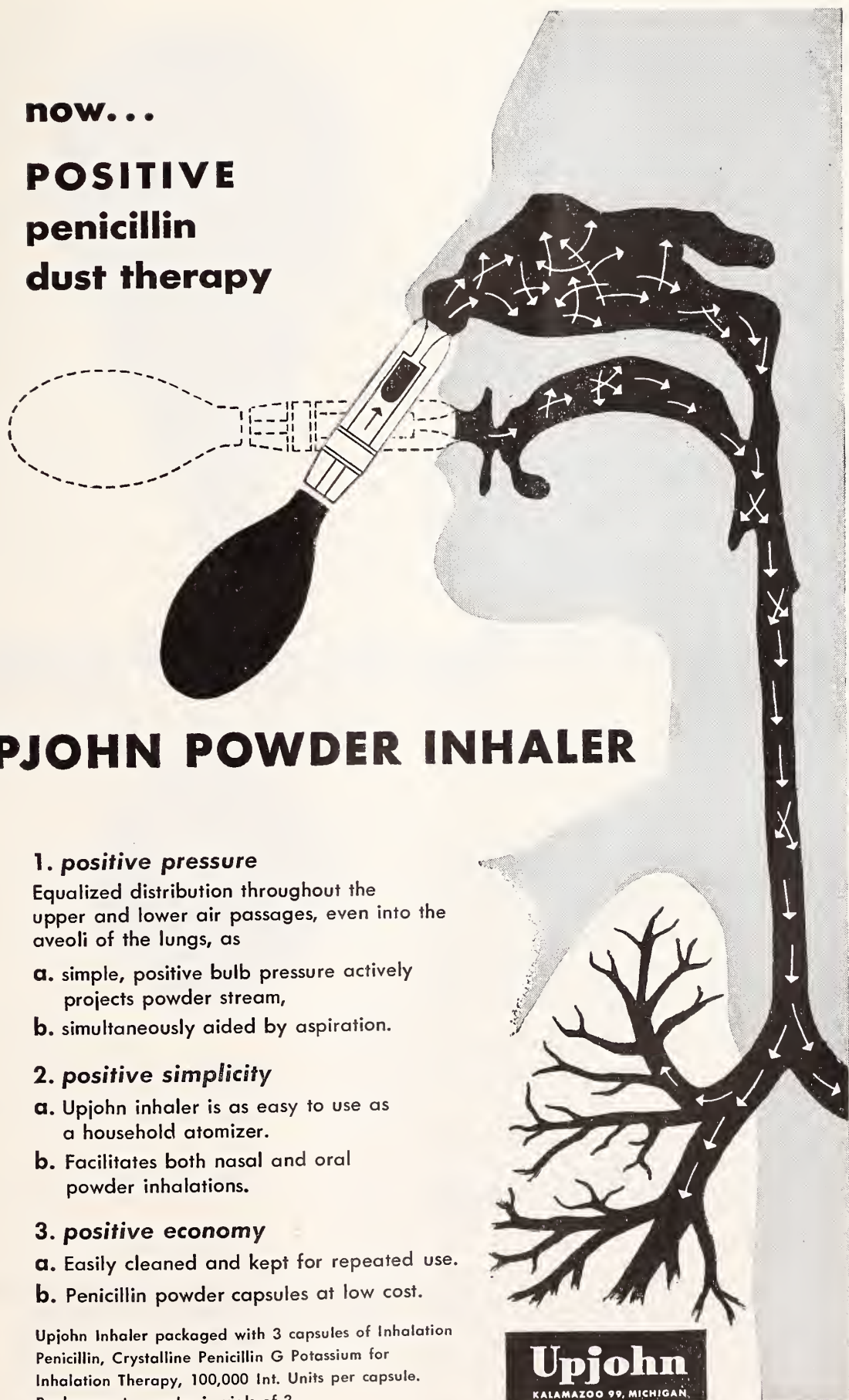
- 1) Those founded upon the author's theory of the pathogenesis of the disease. They are aimed at elevation of blood pressure and stimulation of circulation for the purpose of counteracting the vasoparalytic vascular phenomena which result in stasis and thrombosis of some of the small cerebral veins and capillaries.
- 2) Therapeutic measures aimed at alleviating the myasthenia-like fatigability and muscle weakness. Excellent results have been obtained in a number of cases with generous administration of prostigmin.

Supplementing the generous use of prostigmin, there are prescribed daily muscle exercises as a part of a broad plan of muscular re-education and rehabilitation. A large series of muscle exercises were developed, and these are prescribed individually, depending upon the disabilities of each patient. They have proved effective in a number of cases in the restoration of muscle power and in facilitating recovery in function of the weakened limbs. Needless to say, while patients with less pronounced weakness have revealed relatively rapid beneficial results and considerable improvement, the response in patients with severe and longstanding paralysis has been much slower and less satisfactory.

(Continued on page 44)

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Equalized distribution throughout the upper and lower air passages, even into the aveoli of the lungs, as

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Physical Medicine (Continued)

I know that some of these measures will shock those who still believe that the best thing to do for a patient afflicted with multiple sclerosis is to give him as much bed rest as possible.

In my own experience this unfortunately popular regime serves to accelerate the weakness, spasticity, and uselessness of the involved muscles, and at the same time has a disastrous effect upon the morale of a patient who feels abandoned and deprived of any hope of active help.

3) Finally, but not least, a series of therapeutic measures, that may be summarized under the heading of "morale building."

Like any other serious personal problem, multiple sclerosis should be presented to the patient as a not-hopeless challenge requiring active cooperation with the physician.

ANTERIOR POLIOMYELITIS; EARLY AND LATE ELECTRICAL STIMULATION OF THE MUSCLES

Stafford L. Osborne, Ph.D., A. J. Kosman, Ph.D., H.D. Bouman, M.D., Robert T. McElvenny, M.D., and A. C. Ivy, Ph.D., M.D., Chicago, Illinois. In "SURGERY GYNECOLOGY AND OBSTETRICS" 88:2:243, February 1949.

Saehs in 1910 wrote that the aim of therapy for the patient with anterior poliomyelitis should be to exercise muscles which cannot be exercised voluntarily. For this, he recommended the use of a form of electrical current which would yield the best contraction with a current of moderate strength. Williams and Leviek concurred and maintained that the treatment should be applied early after the diagnosis of the disease.

The present article represents the application of our observations on animals to patients with anterior poliomyelitis. The results on patients with a muscle denervated by section of a nerve will be reported later.

1. A new type of generator was used in this study. The generator supplied a pure sinusoidal current which could be varied at will from two to six thousand cycles per minute.

2. The maximum contraction and tension can be secured in paralyzed muscle with a minimum

current intensity when consideration is given to both current form and current frequency.

3. Children from 2 to 16 years of age and afflicted with anterior poliomyelitis were given vigorous muscle contractions, and tolerated the the current well.

4. Electrical stimulation of the muscles was given to 7 patients as soon as the diagnosis of anterior poliomyelitis was made (the "early" group). Thus treatment can be instituted during the acute phase of the disease without injury to the muscles or the patients. It was also given to 13 patients who had the sequelae of the disease from 6 months to 6 years (the "late" group).

5. In both groups of patients the bulk of the muscles stimulated daily was favorably affected. There was a statistically significant increase in size of the treated muscles for the "late group." In the "early group" where the initial limb measurements were taken before much atrophy had occurred, the mass of the treated muscles was definitely maintained.

6. There was some improvement, though not statistically significant, in the strength of the muscles stimulated.

7. Electromyographic evidence in the "late" cases suggests that electrical stimulation may be of value in helping to restore normal innervation patterns of the involved muscles.

8. There was some evidence, though less tangible, that stimulation of the muscles was a distinct aid in helping the patient to gain a sense of muscle action needed, and that this was an aid in the re-education of the muscle when active exercise was attempted.

9. Treatment should start, according to our results, as soon as the diagnosis of anterior poliomyelitis is assured. However, in selecting muscle for purpose of studying a treatment, 1 or 2 months should elapse after the onset of the disease.

10. The rationale for the use of electrical currents in the stimulation of muscle is discussed.

THE BROADENING HORIZONS OF REHABILITATION AND PHYSICAL MEDICINE

Howard A. Rusk, M.D. In ARCHIVES OF PHYSICAL MEDICINE, 30:1:26, January 1949.

One of the first schools to teach rehabilitation
(Continued on page 48)



liver disorders

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fat infiltration
functional impairment
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Physical Medicine (Continued)

and physical medicine as the "third phase of medicine," is New York University, where a Department of Rehabilitation and Physical Medicine has been in existence for two years as a major department of the college. Major activities of the department are training, research and patient care, through the use of the teaching facilities of the College of Medicine the rehabilitation and physical medicine service at Bellevue Hospital, and the Institute of Rehabilitation and Physical Medicine of the New York University-Bellevue Medical Center.

"This is how the grand socialistic ideal of the Minister of Health, 'taking the money factor out of medical treatment,' works. All of these troubles of the National Health Service are the result of forcing such a complex thing as medical practice into the rigid framework of socialism."

We are well aware of the penalties of delay in diagnosing tuberculosis. Undiscovered, the disease progresses, often to the point of hopeless intractability; unchecked, it spreads freely; and unrecognized, it breeds new cases. If we are to succeed in controlling tuberculosis, this is exactly what must not continue to occur. Francis J. Weber, M.D., Pub. Health Rep., Oct. 1, 1948.

One of the most significant recent advances of the improved tuberculosis case-finding procedure is the program to give a routine chest film to all hospital admissions. As people enter hospitals for reasons of illness, a higher incidence of tuberculosis than that found in the general population may be expected. The U. S. Public Health Service reports this to be twice as much. Approximately 10 per cent of the general population are annually admitted to public hospitals. This large, easily accessible group offers an ideal opportunity for the discovery of unsuspected tuberculosis. S. A. Holling, M.D., Canad. J. Pub. Health, Jan., 1949.

There are many features in a good tuberculosis control program, but all of them are based on the fundamental principle that tuberculosis is contagious, and that the patient who has the germs in his sputum, or who shows X-ray evidence of progressive disease of the lungs such that the sputum is likely to become positive, must be isolated from his family and from the community in a tuberculosis hospital or sanatorium where strict bed-rest, good diet, and special surgical procedures in selected cases, can be provided to stop the advance of the disease and render him non-infective. Miriam E. Brailey, M.D., Baltimore Health News, Nov., 1948.

PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, DEPARTMENT EDITOR



THE EFFECT OF MICROWAVE DIATHERMY ON THE PERIPHERAL CIRCULATION AND ON TISSUE TEMPERATURE IN MAN

Jerome W. Gersten, M.D., Khalil G. Wakim, M.D., Ph.D., J. F. Herrick, Ph.D., and Frank H. Krusen, M.D., Rochester, Minn. In ARCHIVES OF PHYSICAL MEDICINE, 30:1:7, January 1949.

Two hundred and fifty-four observations were made on 50 normal human subjects concerning the effects of microwave radiations (2,450 megacycles per second) on the peripheral circulation and on the temperature of skin, subcutaneous tissue and muscle. The director used was hemispherical and about 9 cm. in diameter and was 5 cm. from the skin during the period of exposure. The output used was 60 or 80 watts, and the duration of exposure varied from one to thirty minutes. The following observations could be made:

(1) Significant increases of blood flow and of tissue temperature in the exposed extremity resulted with both outputs and all durations used. There were minimal general effects and no ill effects.

(2) The greatest amount of energy absorbed was, on the average, in the muscle.

(3) After absorption of energy reached a certain point, the increase of blood flow was sufficient to remove heat at a greater rate than it was accumulating, resulting in a fall of tissue

temperature from the peak reached at twenty minutes of exposure. The greater the increase of circulation, the greater the decrease of the temperature of exposed tissues from the maximal values reached. After thirty minutes of exposure significantly greater increases of blood flow resulted from 80 watt exposure than from 60 watt exposure.

(4) The curve relating increase of blood flow to duration of exposure at 80 watts is S shaped and indicates an early phase of acceleration of of retardation.

FIBROSITIS

James Cyriax, M. D., Physician to the Department of Physical Medicine, St. Thomas' Hospital, London. In BRITISH MEDICAL JOURNAL, No. 4569, p. 251, July 31, 1948.

Fibrositis has been divided into primary and secondary. This is a separation with which I am in the fullest agreement; for in my opinion primary fibrositis is an imaginary disease and secondary fibrositis is a real entity.

PRIMARY FIBROSITIS

Controversy has gone on for many years about the nature and identity of the different disorders included by common consent under this heading. The existence of fibrositis is affirmed by most clinicians, denied by most pathologists, but in the

(Continued on page 38)

NEW METHOD FOR RELIEF OF ALLERGIC NASAL CONGESTION

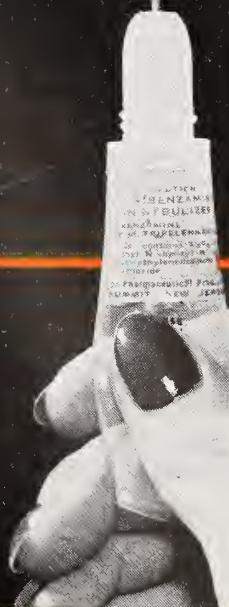
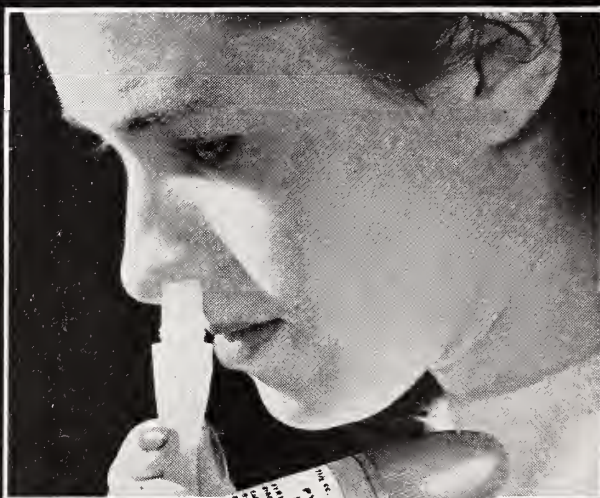
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Physical Medicine (Continued)

absence of an alternative explanation for the symptoms and signs purely negative views have carried little weight.

It is my purpose to draw attention to the ready solution to the problem of the existence or not of fibrositis that can be obtained by going back to first principles. This involves taking a detailed history, making a clinical examination of the patient, and drawing deductions on accepted lines from the physical signs discovered in each case. If this is done the conclusion is forced upon the unprejudiced observer that the symptoms so readily ascribed in the past to "rheumatic fibrositis" (i.e., fibrositis coming on for no apparent reason) are all in fact the result of articular lesions. I say "unprejudiced observer" advisedly; for I started my professional life as the very reverse, and it is only recently that I have been able to convince myself that the condition has no real existence.

PRECONCEPTIONS TO BE DISCARDED

(1) *That Muscle Spasm Denotes a Disorder of Muscle.*—Spasm of muscles about some point is a secondary phenomenon designed to protect a painful structure. Common events are prevention of a joint from being moved beyond a certain range (e.g., in arthritis) or about an inflamed viscus (e.g., in appendicitis). Generalized muscle spasm, apart from congenital myotonia, is also a secondary disorder caused by fear, cold, upper-motor-neurone lesions, tetany, toxins, etc.

(2) *That Muscles in Spasm are Tender.*—At the knee or ankle, for example, where muscles and joints do not overlap, it is obvious that the pain and tenderness lie at the joint, not in the muscles, however wasted they may be and however ready to spring into spasm to protect the joint.

(3) *That Tenderness of Muscle Indicates a Muscle Lesion.*—Many muscles are normally tender at only one point in their extent — e.g., the deltoid insertion at the humerus, the extensor bellies overlying the head of the radius. Moreover, in cases of root pressure in lumbar and cervical disk lesions genuine unilateral deep tenderness of muscle often is found. It was tempting to ascribe this phenomenon to small areas of fasciculation secondary to the lower-motor-neurone lesion, but it occurs in muscles situated

where the pain is felt but not supplied by the damaged root — e.g., the trapezius and levator scapulae muscles in seventh cervical root pressure. It is never tenderness of a muscle, but pain elicited by the appropriate resisted movement that identifies a muscle lesion.

(4) *That Nodules or Crepitus at a Muscle are Significant.*—The answer is obvious now: muscular crepitus is a perfectly normal phenomenon, felt most easily at the cervico-thoracic extent of the erector spinae muscle.

(5) *That Limitation of Movement in More than One Direction can Result from a Muscle Lesion Alone.*—Though the movement that stretches the damaged muscle may be limited, all the other movements of which the joint is capable remain of full range.

(6) *That Examination of Conduction Along a Nerve Suffices.*

TREATMENT OF PRIMARY FIBROSITIS

The underlying principle is simple: to secure reduction of the intra-articular displacement causing the symptoms. The actual technics of reduction have already been described and illustrated (Cyriax, 1947).

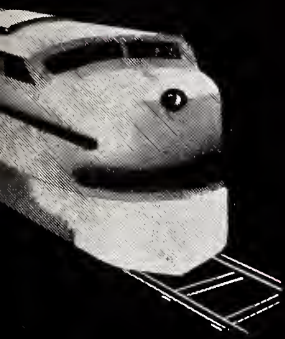
Neck.—This is usually easy, whether the patient has pain in the neck, the scapular area, or the upper limb: a few sessions of manipulation seldom fail to secure reduction. Occasionally continuous traction is indicated. Operation is required in 1 per cent of all cases. Evidence of pressure on the spinal cord contraindicates manipulation.

Thorax.—In simple cases one manipulation may result in full reduction; but eventual relapse is common. The difficult cases are very difficult, and it is easy to make the patient worse. If attempted manipulative reduction—even during traction—fails, rest in bed is indicated.

Backache.—Recovery follows a few sessions of attempted manipulative reduction in about half of all cases. Rest in bed relieves some others but may lead to aggravation. Epidural local analgesia has a lasting effect on some of the remainder. Once well, the patient must be shown how to avoid further attacks of internal derangement. (Cyriax, 1945). The passage of time, particularly in young patients, may bring relief if the protrusion erodes the body of the vertebra.

Lumbago.—Two-thirds of all cases are con-

(Continued on page 40)



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is noteworthy
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TRIMETON* differs from most other antihistaminic agents in not being a derivative of ethanolamine or ethylenediamine. This difference is noteworthy and is responsible for the gratifying clinical results obtained. In one study of 227 patients with various allergic conditions¹

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BIBLIOGRAPHY: 1. Brown, E. A.: Ann. Allergy 6:393, 1948. 2. Wittich, F. W.: Ann. Allergy 6:497, 1948.

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Physical Medicine (Continued)

siderably, one-third fully, relieved by one manipulation. Those whom manipulation does not affect should receive an epidural injection at once. Rest in bed ensures recovery in the end; but this consumes much more time and can often be avoided if these measures are tried first.

Sciatica.—Manipulation is particularly apt to be effective in the elderly; in patients under the age of 50 it is likely to succeed in only one case in four. It is always worth trying, however, if the neurological signs are inconspicuous. Epidural local analgesia effects lasting improvement in others. Rest in bed eventually brings about spontaneous reduction in most cases. If sustained pressure results in atrophy of the affected nerve root the symptoms slowly disappear, though the signs of parenchymatous involvement increase. Operation is required in about one case in eight.

REHABILITATION: ITS APPLICATION TO COMPENSATION MEDICINE

Howard A. Rusk, M. D., Professor and Chairman of the Department of Rehabilitation and Physical Medicine, New York University College of Medicine and Director, Institute of Rehabilitation and Physical Medicine, New York University-Bellevue Medical Center. In COMPENSATION MEDICINE, 1:8:29, December 1948.

Until the advent of World War II, medical care, psychologic problems and the vocational retraining of the disabled worker to the point where he could resume productive work, were too frequently considered as separate and distinct processes having little relationship to each other. That they are interdependent and inseparable has been demonstrated by the successful programs in military and veterans' hospitals, and has been recognized in civilian rehabilitation by the Barden-LaFollette Amendment, which expanded the federal-state vocational rehabilitation programs to include physical restoration, psychiatric services, and medical care, as well as vocational guidance and training.

Immediately following World War I, as today, there was a developing interest in increasing rehabilitation opportunities for the disabled. Unfortunately, this interest died in most quarters in the years between the wars. From it, however, did come some pioneer institutions, such as the Institute for the Crippled and Disabled in New York and the Curative Workshop of Mil-

waukee and Cleveland Rehabilitation Clinic, and some basic legislation, such as the Federal Vocational Rehabilitation Act of 1920. The failure of the movement to gain sufficient stature to become an accepted part of medicine, can be attributed to the fact that it was restrictive largely to guidance, trade training, and the purely vocational aspects of rehabilitation. Few provisions were made for physical restoration or reducing the physical disabilities of the trainees.

There are some 23,000,000 persons in the United States handicapped to some extent by disease, accidents, maladjustments or war. One-third of all draftees were rejected as unfit, and more than 1,000,000 had to be discharged shortly after induction. It is estimated that there are over 7,000,000 persons in the United States disabled by diseases of the heart and arteries, 6,850,000 from rheumatism and arthritis, and 2,600,000 from orthopedic conditions. A statistical review of the casualties in industry for 1947 shows that there were 2,050,000 persons temporarily disabled and 91,000 persons permanently disabled from accidents or occupational disease. One in every 30 workers suffered a disabling injury.

The present programs of the military services and the Veterans Administration have dramatically demonstrated that rehabilitation pays economic as well as social and personal dividends, even for those who suffer from long-standing chronic illness. Typical of the results obtained in the Veterans Administration Medical Rehabilitation Service is a study of 130 chronic neurologic patients in one hospital, all but two of whom were World War I veterans, and many of whom had not been out of bed in ten years. After nine months of medical rehabilitation, 25 had left the hospital and were employed; 40 others had been discharged to their homes capable of light work, and, of those remaining, 30 were ambulatory and undergoing advanced rehabilitation and 25 were capable of some self-care. All but ten of the group had shown worthwhile, permanent improvement. With a five-year life expectancy of these patients, and a per patient day hospitalization cost of over \$12, rehabilitation of this one group has saved the government, and eventually the taxpayer, over \$1,250,000. It would seem logical that a similar program for the

(Continued on page 42)



sign of pernicious anemia!

Achlorhydria is a classical sign of pernicious anemia. Once pernicious anemia is diagnosed, adequate therapy must be instituted and maintained. But, remember, it is not the liver substance itself but rather the hemopoietic principle and secondary factors *stored* in the liver that promote normal blood formation.

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Physical Medicine (Continued)

civilian disabled would result in comparative savings.

THE USE OF A COLD ROOM IN TREATMENT OF HYPERTYREXIA AND BURNS

Herbert R. Brown, Jr., M. D., and Vincent De Lalla, Jr., M. D., Rochester, N. Y. In *ARCHIVES OF PHYSICAL MEDICINE*: 30:2:98, February 1949.

Interference with the ability of the human body to lose heat will result in hyperpyrexia, which may be fatal unless effectively treated. Such a situation was present in the case of a patient with 50 per cent of his skin area burned and with pressure bandages over 85 per cent of his total surface area.

The extreme elevation of body temperature in the case described was easily and quickly lowered to normal range and then maintained at levels below 101 F. by placing the patient in a cold room, which is described.

The value of a controlled environmental chamber is shown, with especial reference to its use in tropical and subtropical zones. The usefulness of such a room to both military and civilian hospital facilities is noted.

ULTRAVIOLET EXPOSURE FROM GERMICIDAL LAMPS

George M. Hama, Bureau of Industrial Hygiene, Detroit Department of Health. In *INDUSTRIAL MEDICINE*, 18:2:75, February 1949.

The use of ultraviolet germicidal lamps in food handling industries has become prevalent in the last few years. The lamps are usually the low pressure mercury type, emitting radiation in the region from approximately 2000 to 3000 Angstrom units, and producing their major output at 2537 Angstrom units. These ultraviolet radiations in this range have been found to exert a powerful bactericidal and fungicidal effect. For this reason, a number of food industries have adopted their use. The principal users are the meat industry, the baking industry, breweries, restaurants and eating places.

Proper installation of the lamps is essential to the control of exposures from germicidal lamps. It is desirable that each installation be supervised or inspected by competent persons versed in the

(Continued on page 44)

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1. Carroll, G., and Allen, N. H.: J. Urol. 55: 674 (1946).

*MANDELAMINE is the registered trademark of Nepera Chemical Co., Inc., for its brand of Hexydaline (methenamine mandelate).

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Physical Medicine (Continued)

technology of the subject and equipped with suitable means for measuring radiation intensities. Where lamps are installed for air sterilization, it is essential that the installation be made so that no one adjacent to the fixture in a normal position can see the lamp, either directly or by primary reflection from specular reflecting surfaces. In certain installations, unshielded lamps may be used if the time factor is small and the suggested limit of 5 microwatt hours per 24 hours is not exceeded. In walk-in coolers for meat storage, it is customary to mount unshielded lamps in the enclosures in order to accomplish a general irradiation.

EVALUATION OF ULTRAVIOLET RADIATION OF SLEEPING QUARTERS AS SUPPLEMENT OF ACCEPTED METHODS OF DISEASE CONTROL

H. G. duBuy, J. E. Dunn, F. S. Brackett and others. In AMERICAN JOURNAL OF HYGIENE, 48:207, September 1948, abstracted in JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 193:7:477, Feb. 12, 1949.

duBuy and his co-workers evaluated the effectiveness of ultraviolet radiation for the control of the common cold and similar infectious diseases of the upper respiratory tract, considered to be air borne, among the occupants of the National Training School for Boys. The study extended over six years. The amount of radiation during the last two years was about five times that recommended commercially. The general bacterial population in the radiated dormitories was sometimes higher, sometimes lower, than that of the control dormitories. The data imply that the air layers are not sufficiently mixed. More efficient mixing might have been obtained at the expense of a materially increased chance of raising dust and lint. The disease incidence among the inhabitants of the radiated dormitories was sometimes higher, sometimes lower, than that of the control dormitories, with no evidence that ultraviolet radiation consistently effected a reduction in disease incidence. Since no significant effect of ultraviolet irradiation in controlling incidence of disease could be detected among about 400 inmates during six years, the beneficial effect of ultraviolet installations for general population use is questioned.

The Illinois Medical Journal

The Official Journal Of

The Illinois State Medical Society



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The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

Harold M. Camp, EDITOR.

Theodore R. Van Dellen, ASSOCIATE EDITOR.

EDITORIAL BOARD — James H. Hutton, Chairman, Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher, Harry Culver, Walter Stevenson, Raymond W. McNealy, Arkell M. Vaughn.

Vol. 96, No. 1



July, 1949

THE 1949 ANNUAL MEETING

The 1949 Annual Meeting of the Illinois State Medical Society held at the Palmer House, Chicago, May 16-17-18, was one of the truly outstanding meetings in the Society's history. The scientific programs held in general assembly were well planned and well attended.

The large exhibition hall was completely filled with technical exhibits and the large force of attendants were busy throughout the session. The scientific exhibits completely filled the Red Lacquer Room, the Foyer and several were displayed in the large halls on the 4th floor of the Palmer House. Elsewhere in this issue of the Journal a list of the scientific exhibits in the two general classes, which received the awards, are mentioned in detail.

There were, as usual, two meetings of the House of Delegates, the first on Monday afternoon and the second was held on Wednesday morning. The President, Percy E. Hopkins, presided over the deliberations of the House in a most orderly manner. Many reports were received and resolutions introduced, all of which were referred to the proper reference committee for hearing and study, and were acted on by the House at the second session.

At the close of the business portion of this second meeting, Walter Stevenson was inducted into the office of President by the retiring president, Percy E. Hopkins. Dr. Stevenson assured

those present that he proposes to function to the best of his ability at all times during the coming year and earnestly asked for the cooperation and assistance of the membership as a whole during his term of office.

A careful check of the registration cards showed the total registration for the meeting, 3607—of which 2,506 were members, 443, exhibitors, and there were 658 registered as guests—of which group, 222 were medical students and interns, many registered nurses, hospital administrators, dentists and technicians.

There was evidence manifested in the House of Delegates for an Annual Meeting in 1950 to be held outside of Cook County and the Council was instructed to make every effort to arrange, if possible, to have it in the "Down State" area. The final decision as to time and place for the meeting next year was left to the judgment of the Council.

It seemed to be the general opinion of the vast majority of those present that the 1949 Annual Meeting was one of the best the Illinois State Medical Society has ever held.

AWARDS TO SCIENTIFIC EXHIBITORS AT ANNUAL MEETING

The Scientific exhibits at the 1949 Annual Meeting held at the Palmer House, May 16-18, were more numerous than for previous meetings,

and were generally considered as the best exhibits of the type ever displayed at the Annual Meeting. It was a most difficult task for the secret committee on awards to determine which exhibits were entitled to the special awards given each year in the two general classes.

The first group gave special consideration to original work and the second to the educational value of the exhibits. After a critical and most careful study of all these fine exhibits, the committee made their selections as follows:

ORIGINAL WORK

1. "Cerebral Antigiography", Booth 15 — Oscar Sugar, Department of Neurology and Neurosurgery, University of Illinois College of Medicine. **GOLD MEDAL**
2. "Bone Marrow", Booth 28 — Carroll L. Birch, Louis R. Limarzi, Department of Medicine, University of Illinois College of Medicine. **SILVER MEDAL**
3. "Radioactive Iodine—Its Use in Diagnosis and Therapy", Booth 12 — D. E. Clark, R. H. Moe, E. E. Adams, Department of Surgery, University of Chicago School of Medicine. **BRONZE MEDAL**
4. "The Use of the Radiograph in Angiography and Aortography as an Aid in the Diagnosis of Congenital Heart Disease", Booth 31 — Wendell G. Scott, Sherwood Moore, Department of Radiology, Washington University School of Medicine, St. Louis, Missouri. **BRONZE MEDAL**
5. "Congenital Heart in Clinical Medicine", Booth 25 — Benjamin M. Gazul, Egbert H. Fell, Hans Popper, Maurice Lev, William Mavrelis, James A. Campbell, Carl B. Davis, Jr., Raul Casus and Hans Hartenstein, Hektoen Institute and University of Illinois College of Medicine. **BRONZE MEDAL**

EDUCATIONAL VALUE

1. Booth 29 — "Forceps" — Frederick H. Falls, Charlotte S. Holt, University of Illinois College of Medicine and the State Department of Public Health. **GOLD MEDAL**
2. Booth 21 — "The Dermatological Album" — David V. Omens, Harold D. Omens, Rush Medical College, Division of the University of Illinois. **SILVER MEDAL**
3. Booth 34 — "Rehabilitation Program for the Hare Lip and Cleft Plate Children" — Wayne B. Slaughter. Institution: Wisconsin General Hospital, Madison; Stritch School of Medicine of Loyola University; Loyola University School of Dentistry. **BRONZE MEDAL**
4. Booth 1 — "The Physician's Creed — Religio Medici"—Samuel J. Zakon, Northwestern University Medical School. **BRONZE MEDAL**
5. Booth 17 — "Fresh Tissue Exhibit" — Illinois Society of Pathologists. **BRONZE MEDAL**

The Scientific Exhibit in recent years has been an outstanding feature of the Annual Meeting, and much credit is due to the Director of Scientific Exhibits, Coye C. Mason and his Committee for selecting the fine display which filled all available space in the Palmer House for the meeting.

YOUR NEW OFFICERS

At the meeting of the House of Delegates of the Illinois State Medical Society held Wednesday, May 18, new officers and councilors were elected to serve the members of the Society for the coming year. They are listed on the opposite page.

This is your official family. These men will work during the coming year to keep the Illinois State Medical Society affairs in order, to keep Illinois a powerful and growing Society, and to guide and assist in the present fight against compulsory sickness insurance.

Write to these men! Invite them to your society meetings. Secure from them statements of policy which should be followed at the county level. They will give of their time and their knowledge and wherever possible. This is a part of the responsibility they assume when they become a member of the Council of the ILLINOIS STATE MEDICAL SOCIETY.

A RESOLUTION BY THE HOUSE OF DELEGATES OF THE ILLINOIS STATE MEDICAL SOCIETY

WHEREAS, The Congress of the United States has now before it for consideration a bill known as S. 1679 or H. R. 4612 or H. R. 4613, which would establish a so-called national health program including a compulsory payroll tax scheme of sickness insurance, and

WHEREAS, this program embodies the distorted interpretations of the national health problem outlined in the Ewing Report and has the support of the present administration, certain small medical splinter groups and the leftwing elements in our population, and

WHEREAS, such a program would establish political control of medicine and place the politician in a position of dictator between the doctor and his patient and give him regulatory and financial power over the practice of medicine, and

WHEREAS, such a program would double or

ILLINOIS STATE MEDICAL SOCIETY

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1st Vice-President: M. M. Hoeltgen, 1607 West 51st Street, Chicago
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8th District: — Harlan English, 139 N. Vermilion St., Danville	1952
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11th District: — Edwin S. Hamilton, 258 East Court St., Kankakee	1950
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Irving H. Neece, 250 N. Water Street, Decatur	1951
Percy E. Hopkins, 800 West 78th Street, Chicago	1950
CHAIRMAN OF THE COUNCIL — Oscar Hawkinson, Oak Park	

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Send advertising copy, and all communications relating to advertising to ILLINOIS MEDICAL JOURNAL, 30 N. Michigan Avenue, Chicago.

Original articles and membership correspondence to Dr. Harold M. Camp, Monmouth, Ill.

Society proceedings and news items and changes in the mailing list to Managing Editor, 30 N. Michigan Ave., Chicago 2, Illinois.

Subscription price of this JOURNAL to persons not members of the Illinois State Medical Society is \$3.00 per year, in advance, postage prepaid, for the United States, Cuba, Puerto Rico, Philippine Islands, Hawaiian Islands and Mexico. \$4.00 per year for all foreign countries included in the postal union. Canada, \$3.50. Single current copies, 50 cents. By mail, 60 cents.

triple the present cost of medical care to our nation, results in confiscation of hospitals, impressment into government service of physicians, dentists, nurses and other professions involved in health care, despite present denials of such intent, and

WHEREAS, such a program would break down the quality of medical care furnished to the American public (now and for many years the finest in the world, and constantly being improved) and it would drive out of the practice of medicine many experienced physicians and it would discourage the finest of our young men and women from entering into such practice and it would make it impossible to give the careful personal attention necessary to good medicine, and

WHEREAS, similar programs instituted in various foreign countries have resulted in many cases in deterioration of medical care, and have brought the nations to national bankruptcy, and have contributed to the growth of State Socialism in such countries;

NOW THEREFORE BE IT RESOLVED:

1. That the House of Delegates of the Illinois State Medical Society, representing 10,000 practicing physicians of Illinois, does express its abhorrence and utter condemnation of the proposal to establish national compulsory sickness insurance, and

2. That this House of Delegates does hereby request of the Congress of the United States that the Congress reject and vote down S. 1679, H. R. 4612 and H. R. 4613 and any other bill making similar proposals for compulsory sickness insurance, and

3. That copies of this resolution, properly attested by the officers of the Illinois State Medical Society, be forwarded to the President of the United States, to the Vice-President of the United States as President of the Senate, to the Speaker of the House of Representatives and to the Senators and Representatives from Illinois now sitting in the Congress.

Percy E. Hopkins, M.D.
President.

Harold M. Camp, M.D.,
Secretary.

Adopted by the House of Delegates of THE ILLINOIS STATE MEDICAL SOCIETY at its 109 Annual Meeting in Chicago, May 18, 1949.

STATISTICS CAN MAKE SENSE

Claims based upon statistics are being tossed like mud these days in Washington. The number of people who are sick, disabled or who could be saved under a different system of medicine is overwhelming, if true. Government spending has taught our appointed law makers to think in astronomical figures and it is not surprising to find them quoting medical statistics in terms of hundreds of thousands and millions. It comes in handy when trying to impress those who are less informed.

Statistics can be obtained to prove almost anything. The proponents of socialized medicine are doing a good job at this but those who are entrusted with care of the sick have reasons to be skeptical. Sometimes we wonder where are the millions of disabled and ill who cannot avail themselves of the services of the physician. If it is a question of cost, why not be honest and compare the rise in medical cost with the general increase in the cost of living. It is lower. Has anyone investigated whether or not we are spending more money to keep automobiles in repair than ourselves? The same might be said of liquor, cosmetics, etc.

It is true that many Americans want something for nothing. The politicians know this too. But the majority of people recognize that value and results mean more, especially when health and life are at stake. In this respect the physician has kept faith with his fellow man. The following statistics from the Bureau of Medical Research of the American Medical Association make more sense and they demonstrate our health progress since 1900 in terms that every one can understand.

1. A dozen funerals in 1900—4 persons had lived at least 50 years.
A dozen funerals in 1949—9 persons had lived at least 50 years.
2. The older half of the people dying in 1900 had lived 30 years or more.
The older half of the people dying in 1949 had lived 66 years or more.
3. One thousand babies born in 1900 were destined to live 49,000 years.
One thousand babies born in 1949 were destined to live 68,000 years.
4. Since 1900 the entire population of the United States has *doubled*. (75 to 150 million)
Since 1900 the population age 65 and over

has *quadrupled*. (3 to 12 million)

5. The LOWEST state maternal mortality rate in 1933 was 4.3.

The HIGHEST state maternal mortality rate in 1947 was 2.6.

THE "GRASS ROOTS" CONFERENCE

H. Kenneth Scatliff, M.D.

The Fifth National Conference of County Medical Society Officers, frequently termed the Grass Roots Conference, was held Sunday, June 5, 1949, the day before the opening of the annual American Medical Association session at Atlantic City. The Chairman was Dr. A. M. Mitchell of Terre Haute, Indiana although the program was obviously sparked from 535 N. Dearborn Street.

To properly cover the three panel subjects into which the meeting was divided, together with addresses by Mr. Clem Whitaker and Senator John L. McClellan of Arkansas, both morning and evening sessions were held.

The three panels comprising the Conference were titled respectively:

(A) Is your Society prepared to care for emergency calls?

(B) Does your Society have an indigent medical care plan?

(C) Is your Society ready for the National Education Campaign?

The meeting opened promptly at 9:30 A.M. with a full house. The first subject — on handling of emergency calls by the Society — brought out several useful points in the course of three talks, breaking the subject into "An Effective Emergency Call Plan", on "Plans for a Small County Society", and "The Twenty-four Hour Telephone Answering Service".

The problem of emergency calls is one frequently discussed in medical journals and just as frequently is brought out with adverse comment in the lay press. All the speakers on this panel recognized the opportunity for good public relations in meeting this obligation. Indeed one speaker, Mr. J. Richard Connelly, Assistant Secretary of the Medical Society of the District of Columbia, said that the public relations question would solve itself with an understanding and cooperative medical profession. Some M.D. has to make the emergency call, the burdensome night call; and every physician should do his part.

As the discussion proceeded it became obvious that no one plan would fit all communities. Each County Society can best smooth out its own peculiarities. To aid in this, a booklet was available at this session prepared by the Council on Medical Service on "Planning for Emergency Medical Calls." From a survey of this analysis, after learning of some of the problems from the speakers, it is believed that any interested local Society can receive much help in handling the problem.

Panel No. Two on Indigent Medical Care Plans, presented their subject by discussions on three specific operating plans. One in Baltimore, Maryland, The Washington State Plan and A County Society Plan as operated in Wichita, Kansas. It was evident that most communities have made some provision for the care of their indigent. It was equally evident that not enough communities have done so at the instance of the profession. Not only is the indigent to be considered, but likewise that marginal individual, the medical indigent. Only thus can we meet the charge that good medical care is not available to all who need it. How to do it without pauperizing the poor in spirit is a problem we must continue to work on.

The third panel besides considering various phases of activity of the County Society in handling and organizing the National Educational Campaign, was enlivened by the personal appearance of Clem Whitaker, Leone Baxter and an English friend, Dr. Ralph J. Gampell of Manchester. Dr. Gampell, having only arrived two months ago presented a brilliant example of medical frustration in the young practitioner. He had finished his internship nine years ago. For five of those years he was in the Royal Air Force. He is one of those young men of whom Winston Churchill said, "Never have so many owed so much to so few." But the real Battle of England for this young man was the battle for medical survival — and he lost. Like most young M.D.'s he had committed himself to the purchase of a practice. He owed \$12,000.00 on this obligation and saw no way of getting it back after the National Health Act made the sale of practices illegal. He tried practicing under this scheme. His public patients rose to 3,000 in number. He used to see twenty patients an hour and make thirty-six house calls a day. He

found that this was not medicine as he had been taught, but it seemed implicit in their scheme of public health care. He became an expert form-filler and that was the reason he got out. Medicine in Britain fell to the socializers, in his opinion for three reasons. (1) Medicine had no public relations at all—virtually no newspaper or radio friends in the country; (2) the doctors were not taken into the confidence of the British Medical Association. The inner councils were supreme; and (3) when the British Medical Association did attempt some sort of defense they had nothing to offer—no alternative plan.

The evening session was equally interesting. In fact we can say it provided a very favorable climax. Clem Whitaker, Director of the American Medical Association's National Educational Campaign, gave an interesting close up of the battle to date. Among other things, he said:

"There are certain men in Washington, judging from their statements, who won't approve of this meeting tonight—and I think it is a very happy circumstance that we have a member of the United States Senate present, not only as a participant, but as a witness!

The false accusations made against the medical profession and the American Medical Association campaign, were contrived for one purpose. They were intended to discredit medicine and to silence opposition to the socialization scheme now pending.

They were intended to stifle public discussion of this vital health issue!

A great many doctors must wonder, as they read the scurrilous attacks on their profession, just what type of tyranny would be in store for physicians and their patients if these ill-tempered advocates of socialization ever got control of American medicine.

The people of America may well question what is involved in this program of Government-controlled medicine when its sponsors try so desperately to besmirch the good name of a great profession and to prevent both sides of the issue from being heard.

But the American people are going to hear the facts, no matter what obstacles are put in the way!

American medicine is going to give them the facts!

There are many men in The Congress, fortunately, who have recognized the trend away

from sound, American principles—and who have both the courage and the foresight to stand against those in our Government who would reach out for unwarranted power over the lives of the American people.

It isn't enough to be a good doctor today—if you want to remain a free doctor!

It's just as important that you be a good citizen — an alert, crusading citizen, taking care of the rights and liberties which came to you as part of your American heritage!

This is a showdown battle in the war between Americanism and Statism—a battle to the finish between those who prize personal freedom, and opportunity and incentive above all else, and those who ask us to barter away our liberty for a spurious promise of security under a system of bureaucratic controls and handouts.

We live in a sick world today, in a world that is spiritually sick, politically bereft—and economically near collapse.

This is the wasting illness of millions of people who have been made economic drug addicts by their Governments — who learned dependence on Government because the master planners of the super-State promised them bounty without work and security without effort.

But when the people know what is actually at stake in this fight, they won't wonder that the American Medical Association—and all the State and territorial medical societies, and the many hundreds of county societies—have enlisted in this fight.

This is a tremendously important issue—a dramatic and spectacular issue in many ways—but our national campaign of education will depend for its success on the simple, commonplace tools of democracy.

Let's not ever discount the simple, every-day freedoms we have in America—lest we lose all freedom.

And American medicine can and must lead the way in this vital work of stopping the spread of socialization. We can ask the people of this country to take inventory of what we have here, in our America—and then let them make the decision as to whether they want to relinquish it.

The American people always have had a sound sense of values. Let's go to them and talk to them about fundamentals. We can put a crusade in motion that will sweep this country—and that will not only save freedom of practice in

medicine, but that will go far toward saving all of our essential freedoms.

An immortal American—Abraham Lincoln—gave us the theme for this campaign. Mr. Lincoln said:

‘Public sentiment is everything. With public sentiment, nothing can fail; without it, nothing can succeed. He who moulds public sentiment goes deeper than he who enacts statutes or pronounces decisions. He makes statutes or decisions possible or impossible to execute!’

If we live up to that text—if we really mould public sentiment in America—we can’t fail.”

Perhaps the high point of the Grass Roots Conference was the last speaker, Senator John L. McClellan of Camden, Arkansas.

Senator McClellan spoke in the evening and when one considers that he was not electioneering, but speaking from his own conviction, it is highly significant.

“The title ‘health insurance’ is an attractive and persuasive ‘window dressing,’” he said, “The evil is in the substance of the proposal. Beneath the outer garment is the body of a false doctrine and a hope that is only an illusion.”

“Congress cannot legislate ‘compulsory’ good health for the American people. There are some fields of service, of course, in which the federal government can and should properly participate, but beyond this it cannot very well go without invading the inalienable rights of the individual and regimenting the medical profession.”

“A ‘compulsory’ health program requires not only submission of the person but demands surrender of the individual’s will to master authority,” Senator McClellan said. “It denies freedom of choice in the exercise of the inherent right of a human being to act independently and of his own free will in the all-important matter and duty of preservation of the health and life of himself and that of his family.”

In his opinion the issue is a “test that will determine whether the moral stamina, self-reliance and character of the American people have so deteriorated that they can now be seduced into approving and accepting the socialization of medical science in the vain expectation that it will prove to be a health Eutopia.”

Then he added, “When our free enterprise system is destroyed or is so crippled that there is no longer any incentive left for private initiative and private capital investments, there is no

alternative except Socialism or Communism. Measures such as the proposed ‘compulsory’ health insurance and others that create state paternalism are simply carrying us further down the road to Socialism.”

Messages such as the Senator so forcibly brought us are most heartening. It is one thing for a doctor to recognize a social challenge involving his own activity; it is entirely different for a high ranking legislator to come to the front, taking a position which might jeopardize his political future.

Conclusion—The meetings and discussions comprising The National Conference of County Medical Society officers was a grass roots affair in real earnest. Participating in the panel discussions were doctors from all sections of the country. From populous centers and from the more sparsely settled areas, came those with the problems bearing on the central theme which was “How can our Society aid in distributing good medical care for all Americans within the framework of free American enterprise”?

Two changing concepts reveal themselves as new forces in American Medicine, both of which may be made to redound to medicine’s credit and usefulness to humanity. First, we have evidence of a changing economic picture. The doctor’s role is a dual one, he must care for the sick and ailing at all times. There is no time off, no surcease from this job. Then in this social crisis now looming so large, he must tell the public of medicine’s situation and what similar schemes have led to abroad. He must devise means of extending his usefulness, of making available to all, that which is possible here in America, namely, the best scientific medical care to be found anywhere in the world. Obviously he could not do that job adequately were he single handed, Thus he has been quick to utilize the helpful services of friends of medicine. Out of a total of fourteen speakers at this Conference, eight of them were layman. And those of us who have come in contact with these groups of loyal non-medical friends in hospital, our societies and other institutions, know how efficiently, how willingly and how earnestly, they make our problems, their problems. Truly we couldn’t do a good job without such help. Secondly, a refreshing change is taking place in the doctors’ thinking. A change which reverts to the attitude of early pioneer days when the doctor, many

times the only educated man in the community, stood up and fought for the best interests of that community. He led the fight for good schools, for proper hygienic and sanitary safeguards and indeed, thinking of Dr. Benjamin Rush, who signed the Declaration of Independence and Dr. John Morgan, who was appointed Medical Director General of the Continental Army in 1775, and performed valiant service throughout the period in which the colonies fought for freedom—he, the Doctor, led the fight for freedom.

So, now again—today—does the doctor pick up the gauntlet impudently flaunted by those who would change our American life. Thus can we, the modern American physician, not only cure the sick but indeed, aid an ailing world.

THUS SPAKE ZARATHUSTRA!

The House of Delegates met on May 22, 1919 in the Congregational Church in Peoria, President E. W. Fiegenbaum presiding. Before that body Dr. Charles J. Whalen, Editor of the Illinois Medical Journal, and Chairman of the Committee On Compulsory Health Insurance spoke:

“DR. C. J. WHALEN (Cook): I think there is at least one committee you ought to hear from in view of the fact that the health insurance matter is to come up in the American Medical Association, and you have a committee that has put a great deal of time in on the subject of health insurance, and you ought to have a report from the Health Insurance Committee.

REPORT OF THE COMMITTEE ON COMPULSORY HEALTH INSURANCE

“Your Committee on Compulsory Health Insurance of the Illinois State Medical Society begs to submit the following report:

“The report covers not only the work done by your committee, but also touches upon the present status of health insurance throughout the United States.

“Your committee submitted its first health insurance report at the annual meeting in 1917. This report was amplified at the annual meeting in 1918. The committee calls your attention to fact that the first report was published in the February, 1917 issue of the Illinois Medical Journal; that a criticism of same, together with a rejoinder, appeared in the March, 1917 issue of the same journal. The 1918 report of the

committee was published in the July, 1918 issue of the Illinois Medical Journal.

“During the past year members of the committee have been frequently called upon to discuss health insurance before medical societies and investigating commissions in this and other states.

“In 1917 the Illinois General Assembly created a commission to study the desirability of enacting health insurance laws in Illinois. This commission began its investigation in the fall of 1918. Your committee appeared before the commission at its hearing in Chicago, November 8, 1918. The arguments used by your committee at this hearing were published in full in the Illinois Medical Journal, January, 1919.

“The published reports of the committee have been reproduced in pamphlet form and have been extensively circulated in Illinois. Throughout the United States, from Maine to California, from individuals and from state investigating committees, hundreds of requests have come to the committee for reprints of the reports of your Health Insurance Committee.

“Your committee herewith also submits a resume of the compulsory health insurance legislation in this country.

“Five or six years ago the American Association for Labor Legislation sent out thousands of copies of “A Tentative Draft of a Bill”. The next year they caused a bill, known as the Mills Bill, to be introduced in the New York legislature. That was the first step in the legislative campaign anywhere in the United States. The bill did not receive more than ordinary notice. The following year a similar bill was introduced, and it did not come out of committee. Bills for the appointment of commissions were introduced in a number of states some two or three years ago, and commissions were appointed in Massachusetts, Maine, Connecticut, New York, New Jersey, Pennsylvania, Ohio, Wisconsin, Illinois and California. Maine reported adversely; Massachusetts’ first commission reported favorably; second commission adversely. Connecticut’s commission reported adversely. New Jersey reported favorably; Pennsylvania favorably; Ohio a bare majority favorably, but as second choice to sickness prevention. Illinois adversely; Wisconsin adversely and California favorably.

“The third year of the Nicoll Bill failed in

New York. The Kehoe Bill, which was the same kind of a measure, failed in Michigan.

"In California a commission to investigate was created by the 1915 session of the legislature, and at the 1917 session this commission reported in favor of compulsory health insurance and the submission of a constitutional amendment empowering the legislature to enact laws on the subject. The amendment was submitted to popular vote in November, 1918, and rejected by a vote of three to one. The president of the State Federation of Labor had been made a member of the Social Insurance Commission. The federation twice approved the amendment, but the election returns indicate that labor did not follow its leaders, every labor center in the state having rejected the amendment by a substantial majority. In fact, the amendment did not carry in a single county in California.

"Massachusetts held a constitutional convention last fall and a social insurance plank was introduced and defeated.

"During the legislative season just closing the Davenport Bill, in New York, passed the Senate as the result of some political trade between Governor Smith, democrat, and four republican senators who became insurgent and created a majority for the democrats. After passing the Senate the Davenport Bill died in the Rules Committee. A somewhat similar bill was introduced in New Jersey, but died in committee. The Myers Bill, in Ohio, will probably have a hearing, but nothing more. A bill passed in Indiana for the appointment of a committee to study the subject. A similar bill in Michigan failed.

"The matter has been agitated in Colorado, Maryland, Oregon and other states each of which has killed either a health insurance bill or a bill creating a commission to investigate.

"Some of the organizations which are on record against compulsory health insurance are:

Michigan Manufacturers' Association
Ohio Manufacturers' Association
Associated Manufacturers and Merchants of New York
National Industrial Conference Board of Boston
The Commercial Federation of California
The New York Chamber of Commerce
The National Civic Federation
National Association of Manufacturers
National Drug Trade Conference

The National Association of Manufacturers of Medicinal Products
The American Pharmaceutical Association
Commonwealth Club of San Francisco
Association of Insurance Commissioners

MEDICAL ORGANIZATIONS

Section of Preventive Medicine, American Medical Association
Illinois State Medical Society
Chicago Medical Society
Ohio State Medical Association
Federation of Medical Economic Leagues of New York
New York County Medical Society
Pennsylvania State Medical Society
Lackawanna County Medical Society of Pennsylvania

LABOR ORGANIZATIONS

American Federation of Labor
The Executive Council of the A. F. of L.
Boston Central Labor Union
Massachusetts Branch, American Federation of Labor
(Speaking at a meeting of the National Civic Federation, held in New York in January, 1917, the following leaders expressed the opposition of their organizations to compulsory health insurance:
Samuel Gompers, president, American Federation of Labor
Warren S. Stone, grand chief International Brotherhood of Locomotive Engineers
Matthew Woll, president, International Photo-Engravers' Union
Hugh Frayne, organizer American Federation of Labor
Peter J. Brady, president New York State Allied Printing Trades Council
Timothy Healy, international president, Stationary Fireman's Union.

FRATERNAL ORGANIZATIONS

National Fraternal Congress
Ohio Fraternal Congress
Associated Fraternal Societies of California
New York Fraternal Congress

POLITICAL AND LEGISLATIVE BODIES

"In 1916 hearings before the House Labor Committee were held in Washington. No action was taken. Hearings covered a week.

"In 1918 the Congress of the United States refused to create a commission to investigate further.

"The Massachusetts Constitutional Convention rejected the scheme by a vote of nearly three to one.

"We are not inclined to the view that the movement is gaining headway, although it might appear to be doing so if one stops to consider the number of states that have had it under con-

sideration recently. We think there is great danger next year in New York State, as their legislature convenes annually. *If, however, the proper kind of a campaign of education is carried on, there will be very little danger, because whenever this proposition is studied there is an overwhelming objection to it.*

"There are two forces attempting to drive this issue through — one the American Association for Labor Legislation, which you no doubt must know is nothing more or less than a misguided aggregation of professors of social economy, or parlor socialists, who are preaching socialism in our colleges. The second force is the welfare organizations and women's clubs. The welfare organizations are inspired by the desire to relieve human misery, and any measure they think may relieve the misery and suffering of the poverty-stricken class appeals as a good measure. The women's clubs are inspired by humane principle, but they have not given any consideration to the measure as one of state economy.

"Your committee recommends that every state wherein this issue has arisen should become very active behind a campaign of education; otherwise we foresee a troublesome and worrisome year beginning with January 1, 1921.

"In order that the subject may be brought to the attention of the delegates of the American Medical Association, the committee offers the following resolution:

"RESOLVED, That the delegates from this Society to the House of Delegates of the American Medical Association be and are hereby instructed to introduce a resolution against compulsory health insurance in the House of Delegates of the American Medical Association, and to support it in every possible way.

Committee on Social or Health Insurance of the ILLINOIS STATE MEDICAL SOCIETY:
CHARLES J. WHALEN, Chairman, J. R.

BALLINGER, Secretary, Edward H. Ochsner, George Apfelbach, C. A. Hercules, Cleves Bennett, W. F. Burres, Joseph Fairhall, W. D. Chapman.

"J. H. RICE: (Adams) I move that the resolution be adopted and the recommendations mentioned in the report be concurred in. (Seconded and carried.)"

We do not know what subsequent action was taken by the A.M.A. House of Delegates, but Illinois had an active and well informed committee, headed by able men. Perhaps their "warnings" were not heeded; perhaps at this time they were "crying in the wilderness", but the spark which lights the torch of education we carry today, was struck firmly and accurately by these physicians from Illinois.

NEW OFFICES AND CLINIC BUILDINGS

The Journal will publish from time to time, pictures and blueprints of new offices and clinic buildings. We believe that many of our members will be interested in suggestions along this line since more and more physicians are building separate office buildings or planning to renovate their present quarters. The physician's office is his workshop and should be planned for maximum efficiency. The advantages are obvious; furthermore, it makes working more enjoyable. The office need not be elaborate nor convey the impression that the physician is "getting rich" or becoming "too big for his britches." Neatness and cleanliness are essential but no patient will complain if the waiting room is pleasant and comfortable and the remainder of the office affords privacy and promotes maximum efficiency on the part of the physician.

We will appreciate help from those who have found the satisfactory solution to this problem. Send us your blueprints and pictures. The best will be printed and proper credit given to the architect and builder if so desired.

CORRESPONDENCE



CLINICS FOR CRIPPLED CHILDREN LISTED FOR AUGUST

The University of Illinois Division of Services for Crippled Children has scheduled 17 clinics to be held throughout the State during the month of August. Of these 12 are to be general clinics where diagnostic orthopedic, pediatric, speech and hearing examinations will be made. Five special clinics will be held, four for children with rheumatic fever and one for children with cerebral palsy.

Attendance at the general clinics have maintained the average of the past two or three years even though there have been more clinics held during corresponding periods. Attendance at the special clinics is limited to invitation only. More than 2700 children attended general clinics during the first four months of this year.

These diagnostic clinics are conducted by the Division in cooperation with local and health organizations. Clinicians are private physicians who are certified Board members. Any doctor may refer or bring children to a convenient clinic for examination or for consultative services.

The August schedule is as follows:

- August 2 — E. St. Louis, St. Mary's Hospital
- August 3 — Chicago Heights, St. James Hospital
- August 4 — Hinsdale, Hinsdale Sanitarium
- August 9 — Peoria, St. Francis Hospital
- August 9 — Effingham, American Legion Home
- August 11—Macomb, Marietta Phelps Hospital
- August 11 — Elmhurst Rheumatic Fever, Elmhurst Community Hospital

August 12 — Chicago Heights Rheumatic Fever, St. James Hospital

August 17 — Aurora, Copley Hospital

August 17 — Carrollton, Grade School at Carrollton

August 18 — Rockford, St. Anthony's Hospital

August 23 — Peoria, St. Francis Hospital

August 24 — Springfield Cerebral Palsy, St. John's Hospital

August 25 — Normal, Brokaw Hospital

August 26 — Chicago Heights Rheumatic Fever, St. James Hospital

August 30 — Effingham Rheumatic Fever

August 31 — Joliet, Will Co. TB Sanitarium

CANCER OF THE LUNG

It is generally conceded that primary carcinoma of the lung is just as common or possibly more common than carcinoma of the stomach. The overall five-year survival rate from this disease is pitifully low—actually less than 5%. There are two reasons for this; (1) the patient fails to come to the physician early enough and (2) there is too long a delay in establishing the diagnosis.

In general there is considered to have been unnecessary delay if; (1) the patient fails to seek medical attention within 30 days after the appearance of the first symptom and (2) the physician fails to make a diagnosis within 30 days after the patient reports to him for medical care.

We are attempting to combat this unfavorable situation by trying to create more awareness on

the part of the public and the doctors as to early symptoms, and by improving the diagnostic facilities for the physicians.

Chest x-ray screening procedures are being looked upon very favorably at the present time as one means of the detection of early cases of cancer of the lung. Since our Division of Tuberculosis Control is already using chest x-ray surveys in its field, it seemed quite practical for us to make use of its activities in attempting to discover early lung neoplasms.

The Division of Cancer Control, therefore, is following up all suspected cases of chest neoplasm as discovered in the routine chest surveys. In attempting to evaluate results it is, of course, necessary that we obtain information from the patient's family doctor. This will necessitate our making contact with these physicians at intervals through the mail. The information requested will be very brief and will impose as little inconvenience as possible upon the physician concerned.

We feel that something of definite value can be accomplished if we can obtain the cooperation of the practicing physician in this project. We would appreciate it, therefore, if those physicians hearing from us in regard to one of their patients with suspected lung neoplasms would send us the information desired.

G. Howard Gowen, M.D., Ph.D.

Chief, Division of Cancer Control

Illinois Department of Public Health
Springfield, Illinois

RESEARCH FELLOWSHIP

The American College of Physicians announces that a limited number of Fellowships in Medicine will be available from July 1, 1950-June 30, 1951. These Fellowships are designed to provide an opportunity for research training either in the basic medical sciences or in the application of these sciences to clinical investigation. They are for the benefit of physicians who are in the early stages of their preparation for a teaching and investigative career in Internal Medicine. Assurance must be provided that the applicant will be acceptable in the laboratory or clinic of his choice and that he will be provided with the facilities necessary for the proper pursuit of his work. The stipend will be from \$2,200 to \$3,200.

Application forms will be supplied on request

to The American College of Physicians, 4200 Pine Street, Philadelphia 4, Pa., and must be submitted in duplicate not later than October 1, 1949. Announcement of awards will be made November, 1949.

ROTATING INTERN PSYCHIATRIC RESIDENT

The United States Civil Service Commission has announced a Medical Officer examination for filling rotating intern psychiatric resident, and surgical resident positions in St. Elizabeths Hospital, Washington, D. C. The salaries for rotating interns are \$2,200 for the first year and \$2,400 for the second year; the salaries for psychiatric resident range from \$2,400 to \$4,100 a year; and for surgical resident, from \$3,400 to \$4,150.

To qualify, applicants for the rotating intern positions must be third- or fourth-year students in an approved medical school. Applicants for psychiatric resident and surgical resident positions must be graduates of a medical school with the degree of doctor of medicine, and must have completed a full year in an approved rotating internship. In addition to the above requirements, applicants for appointment as surgical resident must have completed three full years as residents-in training in surgery in an approved residency. No written test is required for this examination. The maximum age limit of 35 years is waived for persons entitled to veteran preference.

Further information and application forms may be obtained at most first- and second-class postoffices, from civil service regional offices, or from the U. S. Civil Service Commission, Washington 25, D. C. Applications will be accepted by the Commission's Washington office until further notice.

AIR FORCE MEDICAL RESERVE IS ESTABLISHED

General Hoyt S. Vandenberg, Chief of Staff, U. S. Air Force announced on May 25 that applications are being received for commissions in the newly created Air Force Medical Reserve. Physicians, dentists, nurses, and other medical personnel who served with the Army Air Forces during the war may make application through the Air Adjutant General, U. S. Air Force, in Washington.

HOUSE OF DELEGATES



FIRST SESSION, MAY 16, 1949

The first meeting of the House of Delegates of the Illinois State Medical Society was held in the Palmer House, Chicago, on Monday, May 16, 1949.

The meeting was called to order at 3:45 P. M. by the President, Dr. Percy E. Hopkins, Chicago.

THE PRESIDENT: I now declare the 109th meeting of the House of Delegates of the Illinois State Medical Society in session. The Committee on Attendance comprising Drs. M. M. Hoeltgen, Chairman, James Taylor, Robert H. Hayes, Paul A. Dailey, please come forward. I will ask these gentlemen to pass out the attendance slips and request that only you men who have been certified as Delegates sign the slips.

The next order of business was the roll call of the Council and Officers. The Secretary reported present 18 Councilors and 5 Officers, a total of 23.

THE PRESIDENT: The next order of business is the report of the Credentials Committee.

DR. E. S. HAMILTON, Kankakee: The Credentials Committee reports that there are present and certified 75 delegates from the Chicago Medical Society, 75 from downstate and 23 members of the Council and Officers making a total of 173. I move you, Mr. President, that this constitutes the voting strength of this House of Delegates for this session. (Motion seconded by Dr. W. O. Thompson, Chicago and carried).

THE PRESIDENT: What is your pleasure regarding the roll call by the Secretary? Do you wish the roll called or will you accept the attendance slips as signed?

DR. MATHER PFEIFFENBERGER, Alton: I move that the attendance slips be accepted in place of the roll call. (Motion seconded by Dr. E. P. Coleman of Canton and carried).

THE PRESIDENT: What is your pleasure regarding the Minutes of the 1948 meeting?

DR. W. E. KITTLER, Rochelle: If there are no objections or corrections, I move that the Minutes be accepted as published in the July and August 1948 issues of the Illinois Medical Journal. (Motion seconded by Dr. Mather Pfeiffenberger, Alton and carried).

THE PRESIDENT: The next order of business is the appointment of the Reference Committees.

The President appointed the following Reference Committees:

Committee on Credentials: Drs. E. S. Hamilton, Chairman, H. K. Scatliff, J. Roscoe Miller, W. E. Kittler and W. O. Thompson.

Committee on Attendance: Drs. M. M. Hoeltgen, Chairman, James Taylor, Robert H. Hayes, and Paul A. Dailey.

Committee on Reports of Officers, to receive and report on reports of President, President-Elect and Secretary-Treasurer: Drs. Arthur E. Goodyear, Chairman, J. J. Moore, E. E. Davis and E. T. McEnery.

Committee on Reports of Councilors, to receive and report on reports of Chairman of the Council, Reports of Councilors, and Reports of Councilors-at-large: Drs. P. R. Blogett Chairman, F. M. Hagans, Robert Mustell, Frank Deneen.

Committee on Reports of Standing Committees to receive and report on reports of Committee on Medical Service and Public Relations, Committee on Medical Testimony, Committee, on Medical Education and Hospital, Medico-Legal Committee, Medical Benevolence Committee and Committee on Archives: Drs. Charles H. Phifer, Chairman, H. A. Felts, Richard Greening, and L. S. Reavley.

Committee "A" on Reports of Council Committees, to receive and report on reports of Educational Committee, Scientific Service Committee, Postgraduate Committee, Fifty Year Club Committee and Medical Economics Committees: Drs. D. B. Freeman, Chairman, Loren Mason, Harold Swanberg, J. P. Simonds.

Committee "B" on Reports of Council Committees, to receive and report on reports of Advisory Committee to Illinois Public Aid Commission, Constitution and By-Laws Committee, Advisory Committee to American Academy of Pediatrics, Committee on Prepaid Medical and Surgical Care Plans: Drs. James H. Hutton, Chairman, C. Paul White, Harold W. Miller, and R. E. Bedard,

Committee "C" on Reports of Council Committees, to receive and report on reports of Committee on Cancer Control, Committee on Tuberculosis Control, Committee on Venereal Disease Control, Advisory Committee, Veterans Administration, and Committee on Military Affairs and Emergency Medical Service. Drs. W. W. Fullerton, Chairman, Karl Vehe, J. J. Grandone, and C. C. Saelhof.

Committee "D" on Reports of Council Committees, to receive and report on reports of Committee on Rural Medical Service, Crippled Children's Clinic Committee, Committee on Industrial Health, and Maternal Welfare Committee: R. C. Oldfield, Chairman, A. E. Dale, J. P. Fitzgibbons, and Justin McCarthy.

Committee to receive and report on Reports of the Editor, Illinois Medical Journal, Committee on Scientific Work, President of the Woman's Auxiliary, and Advisory Committee, Woman's Auxiliary: Drs. B. E. Montgomery, Chairman, Charles Pope, A. J. Zmugg, and Harry J. Dooley.

Committee on Miscellaneous Business, to receive and report on reports of Committee on Nutrition, Committee on Medical History, Advisory Committee, State Commission on the Chronically Ill, and any other matters referred by the President: Drs. T. G. Knappenberger, Chairman, Robert McCready, G. F. Cummins, and Joseph Mullin.

Committee on Resolutions, to receive and report on resolutions introduced at the first meeting of the House of Delegates: Drs. G. Henry Mundt, Chairman, Walter Hammond, J. Eric Gustafson, and Peter Rumore.

THE PRESIDENT: The next order of business is the presentation of the Outstanding General Practitioner Award. Gentleman, this is Dr. Lee T. Hoyt who was chosen the outstanding general practitioner of the state of Illinois for 1948. He was our candidate for the award to be made by the American Medical Association for the outstanding practitioner of the year. It provides me with a great deal of pleasure, Dr. Hoyt, to introduce you to this body and to present to you this certificate for an Award of Merit, as the most outstanding general practitioner in Illinois for 1948.

DR. HOYT: Mr. President, members of the Council, and members of the House of Delegates: I am losing my hair, my teeth and my sex appeal, and last of all has been my voice. But in spite of this laryngitis I would indeed be remiss if I did not attempt to express to all of you my very great appreciation of

this honor. I went to the country to practice medicine in 1921, and I went for one reason. I thought that if I got far enough away in the mud and sticks at least in the winter time when the roads were deep in mud they would have to have me, for I had no confidence in my ability to earn a living in the practice of medicine, and I was right too. I went in the fall of the year, December. It had been a rainy November, the roads had frozen up and I had to buy new springs for the Silver Spring Buick which I had recently purchased thinking it was a good car. Then came the January thaw and the bottom really went out. I could go on and tell you about the winters I drove through the mud carrying lanterns in the country and of the time when I took a sick child with appendicitis twenty miles through the mud to be operated on. It took twenty-four hours from the time I left home until I returned. I could tell you of many other instances but most of you men know it because you have been through it yourselves. I could go on and take a few cracks at the Specialty Boards which I would love to do and which in my opinion are getting ridiculous. I could say to you that the Specialty Boards and specialists with their too frequent exorbitant fees which they must of necessity charge to justify their training, are bringing us more and more rapidly to the socialization of medicine. I think this is one factor that is most important. I do not know what the answer is. We need specialists but the problem is one which we must solve.

Now, I do want to say that my feeling in this matter has been that I do not deserve this award. I think there are many more men throughout the State of Illinois who deserve it more than I do. I do hope that from this may come a greater appreciation of the general practitioner in the rural areas and that through this there may come more doctors to the country where they are so badly needed. I hope that each county in the future may select a candidate, and that sufficient appreciation can be locally impressed in each county to many of the men, that this award may be given to a larger group of men and I think that will occur as years go by. I could go on with other remarks but I am sure you would say "that poor old gentleman has arteriosclerosis of the circle of Willis" so I had better sit down. (Applause)

THE PRESIDENT: The next order of business will be the consideration of the reports published in the Handbook. The Committee Chairman are privileged to present supplementary reports if they desire.

1949 REPORTS OF OFFICERS

REPORT OF THE PRESIDENT

As my term of office as your 109th president draws to a close and I gather my thoughts to formulate this report, it seems to me that the last year will go down in the records as one of the most important periods in the history of American medicine. That refers, not to scientific achievements, as we would all prefer, but rather to the social and economic relationships of the medical profession. The political upset of last November 2, which gave the deteriorated New Deal a four-year lease on the federal government, also gave to the

agitators for socialized medicine another and unexpected opportunity to try to sell their program to the nation. The "mandate" the revived administration has sought to claim since that vote has added tremendous impetus to the drive for socialization. And that in turn has forced medicine to formulate and execute a plan of even greater drive in opposition for the protection of the health of the American people and to preserve the country's physicians from socialistic serfdom. That is the central fact on which our whole future existence as a free profession depends. It must become a primary interest of every physician.

When the smoke of battle dies down, it is our hope that State Socialism through nationalization of medicine will be doomed forever in the United States. The issue has been raised and the battle joined during this term; it will be for my successors to carry it through to ultimate and indubitable victory.

THE PRESIDENT—As a result of the sudden change in the outlook, the activity of the Society in every part of the state has been raised to a new high level and it will unquestionably go higher. Every officer and most of the members have participated in this increased activity. It is a great satisfaction to record also that a gratifying harmony prevails in organized medicine throughout the state, both in the Illinois State Medical Society as such and among the component societies. Your president has endeavored to contribute as much time and energy as the situation required, taking part in many conferences and committee meetings throughout the state, attending practically all the postgraduate conferences and speaking before many county society meetings and to numerous lay groups.

THE COUNCIL—The members of the Council have responded nobly to the new demands made on them and it is with pleasure and pride that I call their efforts to your attention. Under the able leadership of Dr. Harry M. Hedge, its chairman, the Council has taken on an enormously increased amount of work and meetings that once occupied a leisurely three hours now run to five or six hours of intensive activity. This commendation also extends to the loyal and industrious work of the various committees of the Council and this House, which have contributed much to the welfare of the Society.

THE SECRETARY-TREASURER—It is also a pleasure to record the similarly efficient work of Dr. Harold M. Camp, your secretary-treasurer. Such extra tasks as the collection of the \$25 special assessment and the numerous meetings, increased correspondence and other duties pertaining to the campaign against socialization, have fallen to his lot in the last six months and only his long background of experience and his well-trained staff have made it possible for him to absorb the additional work. I would like to call to your attention that Dr. Camp is approaching the 25th anniversary of his service as secretary of this Society and to suggest that some fitting method be chosen of marking that date and honoring him for his long service.

THE EDITOR, THE EDITORIAL BOARD, THE JOURNAL COMMITTEE—Certainly none of you could have failed to notice the improvement in the appearance of *The Illinois Medical Journal* in the last few months. Under the guidance of Dr. Camp as editor and of Dr. Hedge as chairman of the Journal Committee, a new type-dress, new departments and a brighter, more attractive make-up have been devised to give the *Journal* a unique and distinctive appearance in keeping with its professional quality. The editorial Board, meanwhile, under the chairmanship of Dr. James H. Hutton, has steadily maintained the scientific level of the articles published in the *Journal* and it remains as one of the few top quality professional publications of its type.

The Society is also fortunate in having obtained the services of a competent physician, Dr. Theodore R. Van Dellen of Chicago, as associate editor of the *Journal*. His abilities will certainly further improve the *Journal*. He began his duties as of April 1, 1949.

THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH.—The year saw a continuance of the fine cooperative relationship between the medical profession of Illinois, represented by the Society, and the Illinois Department of Public Health, of which Dr. Roland R. Cross is director. Dr. Cross has attended all meetings of the Council and regularly consults with its members and takes its findings and decisions into account. His attitude has been one of entire cooperation and the Society should be grateful for his attitude in this regard. It is to be hoped that the new administration will retain him in office.

PUBLIC RELATIONS—The present emergency regarding socialized medicine has laid new emphasis on the work carried on by the Committee on Medical Service and Public Relations, headed by Dr. James H. Hutton as chairman and with John W. Neal as executive secretary and James C. Leary as director of the Bureau of Public Relations. In the last analysis, the campaign against socialization is almost entirely a public relations function as outlined by the A. M. A. and Whitaker & Baxter, its public relations counsel. The Society is fortunate that some three years ago it established a public relations office, which has thus had time to develop experience and machinery which has made possible the rapid expansion necessary to meet the demands made on us.

Once it became clear at the interim session of the A. M. A. House of Delegates in St. Louis early in December that the medical profession was going to fight for freedom, it was possible for Illinois to act. A conference of county society officers was called in Springfield December 12, 1948, probably the first such meeting held by any state society. At this meeting the issue was outlined by various speakers and the need for local action emphasized.

When Whitaker & Baxter had completed their planning and outlined the program at their national conference in Chicago February 12, it became possible for Illinois to go into action. Dr. F. Lee Stone of Chicago was appointed to the new national Committee

of 53 as the Illinois representative. A speakers' bureau was set up and additional assistance provided for it under the direction of Mr. Leary. February 27 a second Illinois meeting was held in Chicago, attended by about 175 representatives of county and branch societies, at which the national program was interpreted in terms of local activity. The response was heartening. Illinois doctors are ready to fight. The speakers' list has already expanded rapidly from a handful to nearly 200 throughout the state and we are developing a compact group of effective fighters.

At this meeting the public relations counsel introduced a new device for the rapid training of speakers, a loose-leaf pocket-sized card system in which the pros and cons and essential data of socialization are abstracted for ready reference. This was well-received by our own speakers and it has been a pleasure to find that it is meeting widespread commendation and acceptance throughout the country. Twenty state societies have asked for it, some in large quantities, and many are reproducing it themselves after adapting it to their own jurisdictions. Both the A. M. A. and Whitaker & Baxter have commended it enthusiastically. The latter group, in a letter to me, called the card system "one of the finest kits of material I have ever seen" and commended Mr. Leary for the "skill and thoroughness" of his work. By making this speaker-training device available to other societies, Illinois has also made another valuable contribution to the general welfare.

The Society, of course, makes no attempt to interfere with local activities in the campaign, or in any way to disturb the autonomy of local organizations. We are interested only in stimulating all possible local activities and in assisting local groups, on request, by such services as supplying speakers and literature. There is room—and need—for all types of effort in this great campaign for freedom and, in the long run, the men of any given area are the best judges of what is suitable or requisite for that area.

THE EDUCATIONAL COMMITTEE—The Educational Committee, under the chairmanship of Dr. Charles P. Blair of Monmouth, and with Miss Ann Fox as secretary, has similarly carried on its functions well. The National Education Campaign has forced a sharper definition of the work of this committee as far as the public is concerned. Hence its efforts are to be limited to public health education, while every activity pertaining to the fight against socialization is to center in the Committee on Medical Service and Public Relations. This was necessary to keep our long-established free-will program of teaching sound health principles clear of any connection with the national campaign.

LABOR—A number of conferences have been held with responsible representatives of various labor groups, at which we and they discussed the desirability of organizing voluntary prepayment plans under control of the unions themselves for their members. No final decisions have been reached as yet, but the exchanges so far have been friendly and mutually satisfactory and our exploratory talks continue. The union

representatives want the best possible medical care for their members at reasonable, though not at cheap rates, while your representatives ask only good medical care, with professional supervision of services, free choice of physicians and other well-established and essential principles suitably observed. At this point there seems to be no reason why agreement should not be reached to the mutual advantage of all concerned. If these talks can be brought to a successful conclusion, many large groups will be added to the list of those covered by voluntary plans, adding many thousand more arguments against federal compulsion.

I desire at this time to call attention also to the health care plan of the United Mine Workers now in operation under direction of Dr. Warren Draper, whereby the problem of medical care for members of the union has been made the responsibility of the medical profession throughout the country. It is our belief that the system set up by Dr. Draper affords a golden opportunity for the medical profession to demonstrate again that there is no need for compulsory sickness insurance such as is proposed by the federal government. It is essential that the profession cooperate wholeheartedly in this and similar plans.

Your officers also attended a meeting at Galesburg set up by the University of Illinois to discuss the establishment of medical care and other welfare plans now sought by unions throughout the country. This was an interesting and educative experience, for it revealed to us the wide range of approaches being considered by union labor to the problem of providing medical care to its membership at low cost.

RURAL MEDICAL CARE—Under the Committee on Rural Medical Service, headed by Dr. Harlan English of Danville, substantial progress has been made toward the solution of medical care problems in rural areas. Most important has been the establishment of a joint student loan fund, in cooperation with the Illinois Agricultural Association, to provide money to finance the medical training of country boys who will agree to return to country areas to practice. Three students are at work now under such grants and it is expected that several more will be recruited for next year. We obtained wide recognition in the public and professional press on this work. This type of plan, or something similar to it, is being adopted now by many other states.

Two successful conferences were held in Mt. Vernon and Peoria on successive days in January at which representatives of farm organizations, public officials and medical men sat down to discuss rural health problems, such as tuberculosis, cancer, hospital construction and voluntary prepayment plans. Dr. Cross and the department of Public Health cooperated effectively. These meetings were widely publicized throughout the state and I am satisfied they contributed greatly to better relationship and understanding of our efforts on the part of the public in rural areas. Many commendatory letters and statements were recorded from the farm representatives present. Despite bad weather, these meetings were well attended and they should be repeated each year at least.

A third printing of "Doctors and Horses," the pamphlet outlining medicine's program for rural Illinois and prepared by our public relations counsel under direction of Dr. English, has been made necessary by the continuing demand and it is likely that its use in the educational campaign against socialized medicine will require additional supplies, perhaps a completely new edition.

Illinois was one of four states with rural health programs sufficiently mature to warrant inclusion in an exhibit staged by the Committee on Rural Medical Service of the A. M. A. at the A. M. A. Annual Meeting in Chicago. The Illinois exhibit outlined the 10-point program being carried out by the Society throughout downstate Illinois.

Still another activity which, through wide publicity, called attention to the Society's rural health program was the selection of the outstanding general practitioner of the state—Dr. Lee T. Hoyt of Roseville. Dr. Hoyt, a fine example of the modern country doctor, failed to win the national award at the interim session of the A. M. A. in St. Louis, but we still have our own opinion as to his merits. Nationwide feature stories on the Associated Press and a week-long serial dramatization of his work by radio suggest also that our opinion is shared by key laymen.

The Committee on Rural Medical Service and Dr. English are to be especially commended for their work in this important field.

THE COMMITTEE ON MILITARY AFFAIRS AND EMERGENCY MEDICAL SERVICE—The international difficulties which our country and Europe face have presented a new problem, that of providing against possible catastrophe due to use against us of new military weapons, atomic bombs and bacteriological warfare. The Society has handed this problem to its Committee on Military Affairs and Emergency Medical Service, headed by Dr. Earl H. Blair of Chicago. This committee has been extremely active and, through many conferences, participated in by military men also, has developed a disaster-proof program of medical care in case of emergency to a point at which it has been recently submitted to Governor Adlai E. Stevenson for official recognition and action.

In addition, this committee is charged with responsibility for stimulating enrollment of young physicians in the armed forces, in cooperation with the medical departments of Army, Navy and Air Force. Every member of this society should participate in this effort by encouraging recent or imminent graduates of medical schools to apply for medical officer commissions at once. This applies especially to graduates who received all or part of their medical training at government expense or who were deferred by Selective Service to complete medical training.

THE WOMAN'S AUXILIARY—The Woman's Auxiliary has been increasingly active in the interests of the medical profession of the state and has responded with enthusiasm to appeals for cooperation in the fight against socialization. The Auxiliary constitutes one of the best public relations aids available to

the medical profession, a fact too often disregarded, and it has a difficult task outlined for the coming months. It may play a very important role in the battle by awakening the women of the nation to the effect of the proposed compulsory sickness insurance on their homes, their children, their savings and the general welfare. It has accepted the challenge and it is a privilege to record here our appreciation.

SOCIETY FINANCES—With the campaign against compulsory sickness insurance has come a very great increase in the expenses of the Society. In my opinion, while our funds should certainly not be spent futilely, we should be ready to spend whatever is necessary to stop this un-American socialization scheme, even to the extent of requiring an increase in dues to maintain a sound financial position. It is my belief that failure or inability to accomplish our aims because of an attempt to save money might leave us without any organization at all.

THE HOOVER REPORT—The Commission on Organization of the Executive Branch of the Government, headed by Herbert Hoover, has recently published its recommendations for rehabilitation of the complex structure of the national government. Greater efficiency and great savings of the taxpayer's money will result if these recommendations are put into effect. A nationwide organization is being established to conduct an educational program for the adoption of these recommendations. A good-sized part of the report of this commission touches on government medical care and is, in fact, ammunition for our fighters against compulsory insurance. The Society through its officers is in touch with this newly formed group.

MEMBERSHIP—I would also like to call your attention to the fact that graduates of the Chicago Medical School are still excluded from membership in several county societies. Every society has the exclusive right to set up its qualifications for membership, of course, but such societies should bear in mind that the school is now fully approved. Furthermore, many of its graduates served honorably with the armed forces. Again, there is no reason to regard graduates now in practice throughout the state as anything but capable and sincere physicians playing a difficult part in providing medical care in areas where it is often badly needed. I would like to suggest to every society which falls into this group that, as physicians licensed to practice in Illinois and as men of good repute, capable and honest, they should be welcomed into the ranks of medicine. Such a course is only fair and just and it will lessen the possibility that, in resentment, they may be recruited into the ranks of our enemies.

CONCLUSION—In closing I want to express my heartfelt gratitude to those officers and members of the Society who give their time freely and generously to the business of the Society, to its various committees and to its scientific work. Without their aid the achievements of the last year would have been impossible. It is my hope that the succeeding administration will enjoy a similar cooperation and that many more of you will join in the work of the Society.

Respectfully submitted, PERCY E. HOPKINS,
M. D., *President*.

REPORT OF THE PRESIDENT-ELECT

Your President-Elect has been standing by throughout the year ready at all times to do any spade work that the President may have assigned to him. This was not necessary except on one occasion when the President was out of this country.

However, I have not been unmindful of the fact that though the President-Elect is supposed to be undergoing an indoctrination course for the more important office of President, I have done my best to visit county medical societies which have requested my presence. On a number of occasions, I have not only given scientific addresses, but I have talked about the economics of the present situation in Washington. In some instances, I have appeared as often as two or three times a day addressing lay organizations.

Though I am not optimistic, still at the same time, I am not pessimistic regarding the enactment of Compulsory Sickness Insurance on a national level. The one thing that we must combat is not only the lack of information among lay folks but the appalling lack of information by members of our own ranks. I was much amused after I had addressed a meeting of doctors to have one doctor ask me, "Well what in the world can we say to lay people when they ask us why we object to government medicine?" Intelligent explanations pointing to the sinister implications to our liberties usually bring resolutions by lay groups directed to Washington protesting the enactment of Compulsory Sickness Insurance.

I am deeply grateful for the honor which the State Society has conferred upon me and I realize what an important year is ahead of me as your President. If I can serve you as well and as faithfully as those who have preceded me, I will be satisfied.

Respectfully submitted, WALTER STEVENSON,
M. D., *President-Elect*.

REPORT OF THE SECRETARY-TREASURER

This is our twenty-fifth consecutive annual report as Secretary of the Illinois State Medical Society and many thoughts clamor for utterance as we look back over the years. It has been a long quarter century and it has had its wearisome moments, but they have been more than compensated for in the friendships established and maintained, the satisfaction gained from watching our Society grow in membership, influence and service, and the unique opportunity to have an active role in medical organization during what will some day be known as medicine's "finest hour"—the period when medicine gathered its forces to do battle for the freedom of the profession, the health and welfare of our people and the preservation of our national character.

That 1924 annual meeting was held in Springfield. Dr. E. H. Ochsner of Chicago, as outgoing president, filled the chair of the House of Delegates, finally turning his office over to the president-elect, Dr. L. C. Taylor of Springfield. Dr. J. C. Krafft of Chicago

became the new president-elect, with Dr. John R. Neal of Springfield as first vice president. Dr. Taylor's health was poor all through his year as president and Dr. Neal carried most of the burden of the office, including presiding over the 1925 meeting in Quincy.

The 1924 annual meeting showed a membership of 6,412, a loss of 428 from the 1923 figure. A principal issue before the House was a proposal to establish a 1,000 watt broadcasting station at a cost of \$125,000; it was not approved, but further study of the suggestion was authorized. Other issues still sound familiar—socialization of medicine, the chiropractors' efforts to legalize their status, the attempts made to bar the use of animals in medical education and research, the tendency of lay groups to establish and operate various types of clinics, the demands for immediate licensure made by an increasing number of physicians moving into Illinois.

The first session of the House was held in the evening and the long agenda kept the delegates busy until long after midnight. This discomfiture was eliminated a few years later when the practice of printing the annual reports in a handbook simplified the procedure materially.

Many other changes have come with the years. The membership is now close to 10,000. The annual meeting has grown into one of the principal medical meetings of the year, so large that it is no longer possible to hold it in downstate cities, as desirable as it would be to do so. Our activities have expanded tremendously, as we set machinery to meet the new issues confronting us—health education, public relations, rural medical care, legislation, the National Education Campaign, procurement and assignment during the war, and many others. Many good men have passed to their hard-earned rewards and many more have stepped forward to take their places. It seems proper at this point to step out of my official character for a moment to express my heartfelt thanks to all these men who have had so much to do with the success of the Society's efforts in the last twenty-five years and made it an unforgettable satisfaction to be part of these efforts.

But the present issues make it essential to cease our reminiscences here.

COMPULSORY SICKNESS INSURANCE—Since 1939 we have had a succession of bills before the Congress to provide some form of compulsory sickness insurance, based on a payroll tax. The first asked for a modest \$950,000,000 for the first year, but the sums involved so frightened the public that the proponents eliminated cost provisions. Other changes in the program have been made in determined efforts to get support, but they have all failed.

The latest in the long series of bills is S. 5, introduced in January of this year and more menacing than any predecessor, since it is supposed to be backed by the "mandate" the current administration says it received at the polls last November. The story is the same—a compulsory payroll tax, a huge bureaucracy, eventual enslavement of medicine and destruction of

the present high level of medical care for the public. There is no need here however to review the pros and cons of the issue.

THE A. M. A. SPECIAL ASSESSMENT. The important notes to record in this report are the decision of the American Medical Association to go all out in a battle against the Truman program and this Society's part in helping to fight it. The interim session of the House of Delegates at St. Louis in December voted to impose a \$25 assessment on every member of the A. M. A., the first time such an action has been taken in its 102 years. The vote in favor of the assessment was unanimous. With the fund thus accumulated, a National Education Campaign has been initiated by Whitaker & Baxter, a firm of public relations experts, under the supervision of a special coordinating committee of officers, trustees and delegates. Illinois is represented on this most important committee by Edwin S. Hamilton of Kankakee.

This fund has been misunderstood by many doctors and misrepresented by our opponents. It is not a lobbying fund. There is no high pressure effort in Washington. A part of the money is paying the fee of Whitaker & Baxter for the planning and execution of a program to explain socialized medicine and its dangers to the American public in full confidence that, if the issue is once understood, public opinion will defeat it permanently. The remainder is currently held in reserve for future use. It is being carefully administered and fully accounted for to the last penny.

The Assessment in Illinois. Opponents of organized medicine have done their best to spark a movement among physicians to refuse to pay the assessment. A few have refused. However, we are happy to report that Illinois physicians are paying the assessment willingly, including many who are exempt from dues or assessments. We feel certain that the Illinois State Medical Society will collect the assessment from at least 90 per cent of its membership.

A number of component societies have already remitted for their memberships, while many more are within a few points of 100 per cent payment. One society with 97 members, for instance, reported 94 paid up early in March, with two on vacation and one sick who would pay up shortly.

The assessment is being collected at the county level, along with annual dues, with the county secretary sending remittances to our office and we in turn recording the individual payments and remitting monthly to the A. M. A. A special bank account in the name of the A. M. A. has been opened to handle the funds so that they never appear in our Society audit.

By specific decision, no compulsion of any sort is being exerted to force members to pay the assessment. The question whether to pay or not is left to the individual member's own conscience. We realize, of course, that there is a very small proportion of our membership which favors socialization for some peculiar reason and we can only hope that some day they will see the light. In addition, a certain proportion of our members, because of sickness or other misfortune, is unable to pay now.

In general, the acceptance of the assessment has been widespread and satisfying throughout the state and Illinois will undoubtedly rate high in the list of paid up percentages when the figures are compiled.

The National Education Campaign in Illinois. The plan of battle laid out by Whitaker & Baxter rests largely on a direct personal approach to the voter through speakers and pamphlets with the aim of persuading every possible individual to write personal letters to his or her congressmen and senators opposing S. 5 and of obtaining from every possible organization, large or small, a resolution of endorsement of our position to be forwarded to the President, our senators and our congressmen.

It is essential that full records be kept of such resolutions through copies forwarded to this office for transmission to Whitaker & Baxter and all speeches given by our members be similarly reported to this office or to the Speakers' Bureau.

As recorded in the report of the Committee on Medical Service and Public Relations, the responsibility for development of the speakers' bureau for the campaign has been placed on Mr. James C. Leary, the Society's public relations counsel. This necessitated placing him on practically full time basis and his office and services have been greatly enlarged.

It cannot be too strongly emphasized that this National Education Campaign is a long-term fight. It is not something that can be won with a meeting or two and a few resolutions. Our opponents, with all the power and personnel of government behind them and using vast funds wrung from us as taxpayers, are set to battle hard for their program. We must be equally determined and ready for a fight that will last until we win. Only constant and unflagging effort will give us that victory.

COOPERATION WITH GOVERNMENT AGENCIES—During the last year, we have received many hundreds of letters from the U. S. Public Health Service, the Secretary of National Defense, and other governmental agencies, asking for some type of service. We have endeavored to give every possible cooperation when the requests have been received. Many of these letters have been referred to the Council, and special action has been taken on a number of occasions.

During the so-called "war of nerves" this country has endeavored to maintain a high standard of efficiency in its defense program. With the large number of men in the Army, Navy and Air Forces it is necessary to have a sufficient number of medical officers to give them proper medical and surgical care.

The United States has the largest peace time mobilization in its history, and medicine has never failed in its obligations to government when its services are needed. The Secretary of Defense has repeatedly stated that, by the end of July, there will be a shortage of about 1,600 physicians and 1,160 dentists. This shortage means that the Armed Forces will not have professional men to give minimum medical service to the approximately 1,700,000 men and women who serve their country.

Recently the Secretary of Defense sent a letter to the thousands of young men in medicine who received part or all of their training at Government expense. Many of them were not disturbed by their draft boards, but were permitted to finish their courses and complete their internships. Even though at this time many of them are not subject to a mandate to enlist, there is definitely a moral obligation which should cause them to give most serious consideration of the need for medical officers.

Articles and editorials have appeared in the *Illinois Medical Journal* in recent months, with the approval of our Council, and the Committee on Military Affairs and Emergency Medical Service has also been active in the endeavor to get men in this group to apply for a commission. We have been told repeatedly that, if a sufficient number of young physicians do not apply for commissions voluntarily, it may become necessary to ask Congress to enact legislation which will permit drafting physicians and dentists.

We have been told that first on the list would be those who have had Government training, but have not previously been in the services. It has been definitely stated by the Secretary of Defense that they are not asking for physicians and dentists from areas where a shortage already exists. The main objective at this time is an effort to replace those medical officers who will be eligible for relief from duty in coming months, men who have already been in service for some time, and are eligible for separation from service in the near future.

It seems desirable that this House of Delegates take some action to aid in the procurement of the desired medical corps personnel.

THE SOCIETY—During the last year there has been a further increase in the membership of this Society, and we are rapidly approaching the 10,000 membership mark. We were told recently that with the present membership, this Society is entitled to an additional delegate. For a number of years, we did have 10 A. M. A. delegates, but, with a reapportionment on the part of the A. M. A. House of Delegates, we lost one.

When we had 10, they were equally divided between the Chicago Medical Society and the down-state societies. When we lost one delegate, the House of Delegates of this Society voted to retain five from the C. M. S. and four from the down-state societies, yet calling to the attention of the Society that the A. M. A. delegates do not represent component societies, but actually the State Medical Society membership.

In accordance with a recent change in the A. M. A. by-laws, even though this Society is legally entitled to an additional A. M. A. delegate, one selected at the 1949 annual meeting cannot serve until after January 1, 1950. Delegates are elected for two years dating from January 1, and only those who have already been elected can serve at the regular 1949 session, and the interim session, if held during the last month of this year. It seems quiet apparent, therefore, that we can only certify delegates this year who were elected prior

to January 1, 1949. This will mean that even though the two-year term actually expires, according to our own by-laws, at the regular annual meeting, delegates who were certified for the last session of the A. M. A. House must hold over until after January 1, 1950. Consequently it does seem desirable that our by-laws be amended to conform to those of the American Medical Association.

THE COUNCIL—There is always a full agenda for every meeting of the Council, and in recent years it has been necessary to shorten the interval between Council meetings. Although starting at 9:00 A. M. recent meetings have not ended until mid-afternoon or later. The Council, during the last year, has invited one or two county society officers to sit in at a regular meeting so that they will be better informed as to what the Council actually does at the sessions.

In accordance with the request of the House of Delegates some three years ago, we have endeavored to publish an abstract of the Council minutes of most of the meetings in the *Illinois Medical Journal*. Those of you who have read these minutes no doubt realize that many problems are coming up regularly which require much time and thought on the part of individual Councilors. Prior to the meeting we frequently mimeograph reports and occasionally resolutions to be presented at the meetings, so that the members may be better informed as to the nature of the business to be transacted.

It is rarely indeed that a member of the Council misses any of the meetings, and then only for a good reason. Invariably a member knowing that he will be unable to be present at a meeting, sends a letter or telegram giving his reason for not being there, and desiring that the members know why he is absent. The work of the Council is not only highly important, but is increasing each year, as the minutes will show.

LOCATIONS IN RURAL AREAS—we are still receiving a considerable number of requests for physicians in rural areas in all parts of the state. Letters come from individuals and from various types of organizations such as Chambers of Commerce, likewise we have had a considerable number of visitors in both the Monmouth and Chicago offices, to tell us about the urgent need for physicians in their respective communities.

We also receive letters from physicians desiring to establish practices in rural areas, but many of these prefer locations in cities of from 10,000 to 50,000. Occasionally a letter is received from a young surgeon wanting to locate in a city of 25,000 or more, where there are no surgeons, or where there may be a surgeon about ready to retire who wants a younger man to take over the practice. At the moment we do not know of a single city in Illinois in these population categories which does not have as many or perhaps more physicians today than at the beginning of the late war. The real need is in the small towns of from 1,000 to 2,500, and some smaller, yet large enough so that a very large practice can be established by a physician willing to give the desired care. Most of these locations are in rich agricultural sections where a physician immediately

becomes an important citizen of the community and makes new friends daily.

With the improved schools, many in smaller communities having recently consolidated, better housing facilities, and good all season roads, there are many advantages in these rural areas which are appealing to an increasing number of professional men. We do have some unreasonable requests, such as the town of 500 with one physician which desired another because in the horse and buggy days it had as many as four busy physicians in the town.

There are relatively few communities in Illinois where people cannot be taken to a satisfactory hospital within 15 or 20 minutes, and very often can reach a hospital sooner than in some of the urban centers.

The Committee on Rural Medical Service has an interesting report in this handbook which should be read by every member of the Society, and it will appear with the complete transactions of the annual meeting in the July-August issues of the *Illinois Medical Journal*.

DEATHS OF MEMBERS

Herman H. Cole, Springfield, born in Alton, 1893, graduated from University of Michigan, 1917, joined A. E. F. for World War I, seeing overseas service until end of war. Active member of Illinois Tuberculosis Association and Illinois Heart Association. Member and past president, Sangamon County Medical Society, First Vice President, Illinois State Medical Society, member and chairman of several state committees, special advisor to Governor Green in Veterans' Affairs. Very active in state and county medical society work, regular attendant of the annual meeting for many years. Died suddenly of a heart attack at St. John's Hospital, Springfield, February 16, 1949, aged 56.

David J. Evans, Aurora, Rush Medical College, 1898, Emeritus Member of Illinois State Medical Society, member of staff of St. Charles, Copley and St. Joseph Hospitals of Aurora; died April 7, 1948 of coronary thrombosis, aged 75.

William R. Fringer, Rockford, graduated from Northwestern University Medical School, 1888. Very prominent in ophthalmology for many years, member of the special societies, Emeritus Member, Illinois State Medical Society, Fifty Year Club, died March 7, 1948, aged 84.

Herbert L. Pettitt, Morrison, graduated from University of Illinois College of Medicine, 1906; Assistant Director, Illinois Department of Public Health, 1941-42, always prominent in county and state medical society activities, serving as Councilor for Second District until compelled to resign on account of health, died May 6, 1948 of coronary occlusion, aged 72.

Samuel J. McNeill, Chicago, graduated from Rush Medical College, 1902, long time member, Chicago Medical Society, and Illinois State Medical Society, member of the state society council for a number of years, serving one year as chairman of the council, died February 16, cerebral hemorrhage, aged 73.

Robert Bruce Preble, Chicago, graduated from Northwestern University Medical School, 1891, for many years head of Department of Medicine, Northwestern, past president, Chicago Medical Society, member of many special societies, died July 26, 1948 of myocardial infarction, diabetes and third degree burns, aged 82.

Frank L. Brown, Chicago, graduated from Chicago College of Medicine and Surgery, 1912, for several years, Chairman, Scientific Service Committee, Illinois State Medical Society, two years as member of A. M. A. House of Delegates, from Illinois State Medical Society, died December 7, 1948, aged 62.

Frank E. Simpson, Chicago, graduated from Northwestern University Medical School, 1896, formerly Clinical Professor of Dermatology at Northwestern, past president, American Radium Society, member of the Fifty Year Club, died December 13, 1948, aged 79.

H. C. Hill, Streator, graduated from Rush Medical College in 1894, Emeritus Member and Member of the Fifty Year Club, died suddenly on March 9, 1949.

A. L. Adams, Jacksonville, graduate of Bennett College of Medicine and Surgery, 1886, member of Fifty Year Club, Emeritus Member, prominent for many years in field of Ophthalmology and for many years prominent in affairs of Section on Eye, Ear, Nose and Throat, died January 31, 1949, aged 83.

Bert G. Wilcox, Joliet, graduate from Chicago College of Medicine and Surgery, 1912, chief of staff at Silver Cross Hospital, Joliet, and member of staff St. Joseph Hospital, first vice president, Illinois State Medical Society, 1931, died November 3, 1948, aged 68.

Bert I. Beverly, Oak Park, graduated from Rush Medical College, 1924, Associate Professor of pediatric psychiatry, University of Illinois College of Medicine, (Rush Division) member of many special societies, prominent for years in Section on Pediatrics, made many talks throughout the state for Scientific Service and Post-graduate Committees, died suddenly in his office following a heart attack, September 24, 1948, aged 54.

Frank J. Novak, Jr., Riverside, graduate from the University of Illinois College of Medicine, 1914, prominent in Otology, Rhinology and Laryngology, member of many societies, and in Section on Eye, Ear, Nose and Throat of the Illinois State Medical Society, died of coronary disease, July 27, 1948, aged 60.

Time and space will not permit us to list all of the members of this Society who have passed to their eternal reward since the last annual meeting, but we once more note that many of these fine members of the medical profession died in their office, home, on railroad, or elsewhere from some condition which took them suddenly, in the traditional way of many physicians who work until the terminal ailment.

Year after year, in reporting deaths of members, we are invariably reminded that the death rate among physicians is higher than for almost any other professional or business group. "Never give up" seems to be the motto, and relatively few of these fine men have actually retired to enjoy their closing days with

comfort and ease. They and their work will long be remembered by their many patients who realize that they served humanity.

In closing this portion of the annual report we again want to thank the other officers of the Society for their assistance and constant encouragement in trying days, likewise members of the Council with whom we have associated so freely during another year. We also want to thank publicly the county society secretaries and other officers who have cooperated so splendidly in the ever increasing duties which have been theirs.

In looking over past reports and activities of this Society over a quarter of a century, one can readily see how different the responsibilities of the medical profession in this, as well as in all other states, are from those of former years. When we note with pride the fine work which has been done in research laboratories, by outstanding clinicians, the improved technics in surgery in its many branches, the newer drugs, accessories which we have been able to use so satisfactorily, it is indeed with a sense of pride, that we as physicians have lived and worked during the period of the greatest advancements ever made in the improvement of medical care.

We can only hope that those who desire to change all of this and create completely new methods of caring for the sick, placing the responsibility upon politically controlled groups, instead of in the hands of physicians on their own initiative, will give serious consideration to the importance of the old time physician-patient relationship and not destroy it.

MEMBERSHIP DATA—Members in good standing as of April 30, 1948.		9,735
Added during the year:		
New members	608	
Reinstatements	43	
Total added	651	
Total	10,386	
Dropped during the year:		
Died	147	
Moved away	181	
Resigned	20	
Dropped for non-payment of dues	114	
Expelled	0	
Duplicates in file	9	
Total dropped	471	
Net Total, April 30, 1949	9,915	

FINANCIAL REPORT OF THE SECRETARY

Receipts from County Societies	
Adams	\$ 1,045.00
Alexander	190.00
Bond	130.00
Boone	215.00
Bureau	785.00
Carroll	150.00
Cass	260.00
Champaign ..	1,665.00
Chicago Medical Society	85,772.00
Christian	435.00
Clark	120.00
Clay	160.00
Clinton	360.00

Coles-		Macon	2,370.00
Cumberland .	590.00	Macoupin	20.00
Crawford	335.00	Madison	1,735.00
DeKalb	580.00	Marion	465.00
DeWitt	200.00	Mason	105.00
Douglas	430.00	Massac	91.00
DuPage	1,475.00	Menard	170.00
Edgar	210.00	Mercer	70.00
Edwards	70.00	Monroe	135.00
Effingham	330.00	Montgomery .	250.00
Fayette	190.00	Morgan	856.00
Ford	210.00	Moultrie	70.00
Franklin .....	.00	Ogle	380.00
Fulton	515.00	Peoria	3,065.00
Gallatin	75.00	Perry	180.00
Greene	135.00	Piatt	100.00
Hancock	215.00	Pike	175.00
Hardin .....	.00	Pope .....	.00
Henderson	30.00	Pulaski	70.00
Henry	630.00	Randolph	270.00
Iroquois	300.00	Richland	120.00
Jackson	335.00	Rock Island ..	1,540.00
Jasper	75.00	St. Clair	1,755.00
Jefferson-		Saline	365.00
Hamilton ...	270.00	Sangamon	2,260.00
Jersey .....	.00	Schuyler	60.00
Jo Daviess	270.00	Shelby	270.00
Johnson	84.00	Stephenson ...	495.00
Kane	1,815.00	Tazewell	535.00
Kankakee	1,030.00	Union	195.00
Knox	669.00	Vermilion	1,205.00
Lake	1,070.00	Wabash .....	.00
LaSalle	1,415.00	Warren	315.00
Lawrence	135.00	Washington ...	.00
Lee	575.00	Wayne	155.00
Livingston	625.00	White	40.00
Logan	295.00	Whiteside	570.00
McDonough ..	415.00	Will-Grundy ..	1,950.00
McHenry	358.00	Williamson ...	495.00
McLean	1,355.00	Winnebago	2,235.00
		Woodford	195.00
Total			\$133,930.00

RECEIPTS AND PAYMENTS—Fiscal Year Ended April 30, 1949.

RECEIPTS	
Component Societies	\$133,930.00
Less Benevolence Fund	38,582.50
Net Total	95,347.50
Subscriptions—Journal	275.73
Advertising—Journal	52,853.64
Exhibits—State Meeting (1948) ..	3,100.00
Exhibits—State Meeting (1949) ..	7,915.00
Interest—Government Bonds	2,875.00
Dividends (C. & N. W. Ry. Co.) ..	62.00
Miscellaneous and Refunds	485.33

Total Receipts	162,914.20
Cash Balance, May 1, 1948	103,000.02
	<hr/>
	\$265,914.22

PAYMENTS

Secretary's Office Expense	\$ 28,350.25
Council Expense	13,452.51
A. M. A. Meeting Expense	4,890.31
State Meeting Expense	17,360.54
Society Exhibit Expense	282.27
Legal and General Counsel Expense	11.76
Journal Expense	51,598.58
Fifty Year Club Expense	278.37
Secretary to Committees—Chicago Office ..	2,340.00
Committee Expenses:	
Advisory Committee to Illinois Public	
Aid Commission	10.00
Committee on Archives	3,481.36
Educational Committee	16,309.40
Advisory Committee on Child	
Health Service	60.10
Committee to Investigate Prepayment	
Plans for Medical and Surgical Care ..	1,434.71
Maternal Welfare Committee	963.46
Medico-Legal Committee	32.23
Committee on Medical Service and	
Public Relation	34,022.71
Committee on Medical Testimony	133.70
Committee on Military Affairs and	
Emergency Medical Service	385.57
Postgraduate Committee	2,457.04
Committee on Rural Medical Service	7,286.71
Scientific Service Committee	825.33
Tuberculosis Committee	197.08
Committee on Venereal Disease Control..	17.00
Women's Auxiliary	189.93
Social Security Taxes	282.85
State Unemployment Insurance Tax	141.66
Federal Unemployment Insurance Tax	82.78
Refunds	32.00

Total Expenses	\$186,910.21
Cash Balance, April 30, 1949	79,004.01

Total	\$265,914.22
Respectfully submitted, HAROLD M. CAMP,	
M. D., <i>Secretary-Treasurer.</i>	

FRED N. SETTERDAHL
Certified Public Accountant
224 Robinson Building
Rock Island, Illinois

May 2, 1949.

To The Members of The House of Delegates:
Illinois State Medical Society:

CERTIFICATE OF AUDIT

I have audited the accounts of the following for your Society for the fiscal year ending April 30, 1949:
Secretary's Office—Dr. H. M. Camp, Secretary.
Journal Office—Mr. L. E. Malley, Manager.
Educational Committee—Miss Ann Fox, Secretary.
Benevolence Fund—Dr. H. M. Camp.

SECRETARY'S ACCOUNTS:

Receipts: Dues received from Component Societies have been verified with duplicate receipts, the Master Ledger cards of each Component Society and compared with the Secretary's published report.

Journal Receipts have been verified with reports from the Manager and reconciled with the Journal Advertising accounts.

Bond Interest received was compared with Interest due on Bonds. Other receipts consist of Exhibit rentals, Journal subscriptions, etc. which were taken into account as recorded. All receipts are recorded on the Secretary's records and deposited in the depository bank.

Payments: Payments are made by check and are supported by approved vouchers, orders, etc.

All funds are deposited in the name of the Society and cash balances were reconciled with Depository Bank statements.

The Society has invested funds in U. S. Government Bonds amounting to \$115,000.00 which are issued in the name of the Society. Also, the Society has 31 and 70/100 shares of common stock of the Chicago & Northwestern Railway Company. This stock was issued in lieu of the Bonds formerly held.

The accounts of the various Departments have been well kept, and in my opinion your Secretary's report represents the true transactions for the year.

The Council is furnished with a detailed report which agrees in totals with your Secretary's Report.

Respectfully submitted, FRED N. SETTERDAHL,
Certified Public Accountant.

THE SECRETARY: I have a very short supplementary report relative to the American Medical Association assessment. You have all been hearing about this assessment and we have been accused of being somewhat dilatory about the payment on the assessment in Illinois. When I came in to Chicago two weeks ago I found a note from the American Medical Association saying that they had not received our assessment. I knew we had sent remittances monthly beginning with February first until April first. We made a very interesting discovery, that we had sent a check for \$50,000 to the American Medical Association with an accompanying letter dated April 1st, which had not reached its destination. We immediately stopped payment on the check and sent another one for \$50,000 and also one for \$50,000 for the month of April. I am very happy to say that as of yesterday Illinois is credited with 63 per cent payment of the assessment.

You may be interested to know that California is the only large state Society that has a larger percentage of payment, 73 per cent. Colorado, a small state has 72 per cent, Pennsylvania, a large state, 55 per cent, New York, 38 per cent, Iowa with a small membership, 73 per cent. I still think that we should get at least 90 per cent of the entire membership of our Society to pay this American Medical Association assessment. I have a letter that was handed to me with a check for \$25. It is so interesting that I wish to read it. It is not the first one that we have received and the American Med-

ical Association has received dozens and dozens of similar ones. "I am not a doctor but I want to help in this cause so that everyone may know about it." This man is a jeweler. The check has already been acknowledged by the county society and will be acknowledged by the State Medical Society and he will get a very nice acknowledgment from the American Medical Association.

None of this money is to be used for propaganda purposes. We have had many letters coming in asking if any of this money is to be used locally. It is not, it all goes to the American Medical Association. I want to call attention to the booth in the exhibit hall where we have a very fine line of pamphlets. Some of this material has been off the press only three or four days. It is set up under the supervision of the Bureau of Public Relations of the Illinois State Medical Society and the Educational Program of the American Medical Association. I hope you will all see it. There are some 18 different pamphlets and I hope you will help yourselves. As of May 1 we have sent in \$150,000.

REPORT OF THE CHAIRMAN OF THE COUNCIL

Since the organization of the Council on the last day of the Annual Meeting in 1948, the Council has held seven meetings including the one at the Abraham Lincoln Hotel at Springfield on December 12. The rest of the meetings have been held at the Palmer House in Chicago. It has been a most tempestuous year for medicine in general with many turns that at first seemed frightening but as time proceeded, control was obtained and a little breathing spell seems now to have been allowed. There have been many activities of considerable importance before the Council during the past year and the interest and responsibility of every Councilor certainly deserves the commendation of this House of Delegates. When men, busy in the practice of medicine, with worries of socialized medicine constantly presenting themselves to them and with the future of all medical practice more or less unstable, when such men, leaders among their fellow men, elect seven times during the year to give up their practice and in many instances travel several hundred miles, sleeping on sleepers, and catching trains at most irregular hours day and night in order to give their services uncompensated for the furtherance of the highest standards in medicine in the State of Illinois, it must be recognized that they are making a real sacrifice and deserve credit therefor.

There has been a definite cooperation with the Chicago Medical Society and its Tuberculosis Committee in forming and urging the local and state legislation for tuberculosis. Many meetings have been held and definite progress has been made both as to the care, the political-medical relationship, and the cost per day per patient in the city areas as well as down state.

The letters which have been published by Dr. Harold Camp, our hard working and efficient Secretary of the State Society, have been interesting and educational and I feel should be continued in the future.

One of the outstanding activities during the past year was the two day session of the Rural Medical

Service, under the direction of Councilor Harlan English of Danville. These two meetings were practically identical in program, the first being held on January 20 at Mt. Vernon, while the second was held the following day at Peoria. The faculty presenting the papers, reported at Mt. Vernon on January 20th, carried out the complete program there, then were transported in cars over icy and dangerous roads to Peoria where a similar meeting was held the following day. Attendance at these meetings was most gratifying including the representative laymen of the State. At these councils there was a panel on "Hospital Construction and Location" presided over by the Director of the Illinois Department of Public Health, Dr. Roland Cross. Mr. Frank A. Johnson, Vice President of the Chamber of Commerce at Mt. Carmel, spoke on the Wabash County part in the program. The Aledo Project was discussed by Mr. Albert McCutcheon of the Hospital Committee of the Board of Supervisors at Aledo. The Carthage Project was presented by Mrs. Mary F. Hartzel, President of the Memorial Hospital Association of Carthage. A second panel on "Tuberculosis, What Can Be Done About It?" was presided over by Dr. Clifton Hall of the Division of Tuberculosis Control of the State Department of Health. "Compulsory Health Insurance," a third panel, was conducted by Ralph H. Blodgett, Ph.D., Professor of Economics of the University of Illinois in Urbana, assisted by Dr. Harlan English. The fourth panel, "Crusade Against Cancer," was supervised by Dr. John A. Rogers, the Director of the Illinois Division of the American Cancer Society. Dr. Charles F. Sutton, Chief of the Division of Local Health Administration of the Illinois Department of Public Health, conducted the discussion of "County Health Departments, What They Cost and What They Do." The panel on "Opportunities of Medicine and the Allied Professions such as Pharmacy, Dentistry, Nursing, and Laboratory Technicians" was presented by Dr. H. M. Hedge, assisted by Dr. L. J. Murphy of the Murphy Laboratories of Chicago, and Mrs. Mary Falk Bleeker, R. N., Assistant Executive Secretary of the Illinois State Nurses Association. Many favorable comments have been received on these two days of Rural Medical Service, and its results, we are sure, were in the form of a very desirable public relations work.

The Nutrition Meeting, held on July 12 at the Union League Club under the direction of Dr. G. C. Otrich of Belleville and Dr. John P. O'Neil of Chicago, made its place in the medical record of Illinois during the past year.

The Secretaries' Conference in Springfield at the Abraham Lincoln Hotel, December 12, was an outstanding success. Secretaries from all over the state, many of the Presidents, and, in some instances, active workers from County Societies attended this meeting. It was the second conference of this sort and lived up to the reputation of doing a real work in appraising the local medical officers of the work that was being done by the State Society and the Council.

Much interest this year was evinced at the Interim Session of the American Medical Association at St. Louis where the twenty-five dollar special assessment

was levied. Many individuals over the State have inquired as to how this money, which will amount to something in the neighborhood of \$3,000,000, was to be spent. For their information, we will say that the American Medical Association has appointed a Coordinating Committee designated "For the protection of the people's health." This committee comprises Dr. Henderson of the American Medical Association Board; Dr. Sensenich, President of the American Medical Association; Dr. Lull, Secretary and General Manager of the American Medical Association; Dr. Hamilton of Illinois; Dr. Gunderson of Wisconsin; Dr. Martin of Virginia, of the Board of Trustees; Dr. Cline of California; Dr. Robinson of Arkansas; and Dr. Bates of Pennsylvania, of the House of Delegates. In order to facilitate speedy action and avoid the necessity of calling the entire Coordinating Committee from their various residences, an Executive Committee was elected from this group which comprises Dr. Henderson, Dr. Sensenich, Dr. Klein and Dr. Hamilton.

One of the outstanding events of this year was the selection by a secret committee of the outstanding general practitioner from Illinois, who was recommended at the Interim Session as Illinois' representative for the outstanding general practitioner of the United States. The man selected was Dr. Lee Turner Hoyt of Roseville, Illinois. The committee making the selection was appointed by the Chairman of the Council and consisted of five practitioners from the State, none of whom were members of the Council. Dr. Hoyt will be presented with the Illinois certificate of commendation properly inscribed at the Meeting of the House of Delegates at the annual session in 1949.

The Committee on Arrangements for the 1949 Annual Meeting, with Dr. M. M. Hoeltgen as Chairman and Dr. Walter Bornemeier as Vice-Chairman, has been most successful in making arrangements for this general session. Their committees were appointed early and have worked hard in preparation of the details of this meeting.

The Medical History Committee, under the Chairmanship of Dr. James Hutton, has been active and is progressing satisfactorily. The activity, however, has been somewhat reduced in view of the other important activities and financial necessities during the past year. Dr. Berghoff in his Postgraduate Committee has completed the full allotment of twelve Postgraduate Conferences over the State and has achieved an enviable record in the quality of the papers presented and the attendance at these conferences.

The Crippled Children's Committee was increased one member by the authority of the June 6 Council and now includes Dr. Gerard Krost, the Chicago pediatrician, who is an authority on this type of work.

Dr. Lull has notified the Illinois State Society that at this House of Delegates, due to the increase in the number of memberships in Illinois, we will be entitled to one more delegate to the American Medical Association Convention to be held in Atlantic City. This will make our delegation ten in all.

The Council took one step in efficiency this year inasmuch as the Council meets but six or seven times a

year or on the average of once every two months of authorizing during the interim periods the President, the President-Elect, the Chairman of the Council, the Secretary, and the Chairman of the Finance Committee to act as an authoritative committee on any matters which would of necessity be taken up between the meetings of the Council, all actions of this committee to be referred for final approval to the Council.

Roland Cross, Director of the Department of Public Health of the State of Illinois, has been mentioned many times in the Council reports for his cooperative attitude in programs and policies in which the State Society and the State Department of Public Health were to be joint participants.

One complaint which has been registered twice during the past year and which should be taken into account by every County Society and every practicing physician throughout the State is that transients passing through a community and needing medical care regardless of their financial ability to compensate should be given the best medical care possible as a matter of good public relations. Provision should also be made by every community for the care of such cases or emergency cases which might arise on the Wednesdays or Thursdays when the physicians are away from their offices obtaining a short breathing spell from their very busy life. These points are very important especially at this time and have been mentioned and discussed frequently in the Council.

The Journal Committee and the Editorial Board in joint session awarded the two best papers during the past year to Dr. Bert I. Beverly and Dr. Kenneth L. Roper. Unfortunately, Dr. Beverly died suddenly before the award was issued but the committee decided to give the award posthumously to Mrs. Beverly as it had been fairly granted to Dr. Beverly before his death.

Mr. James C. Leary, Public Relations Officer for the Illinois State Society, has conducted a very marvelous work during the past year and at the last Council meeting was assigned the title of Director, Public Relations Bureau, Illinois State Medical Society. His work on the cards for the speakers on Compulsory Sickness Insurance has been most favorably received and requests for them have been made by nearly half of the states of the Union. Whitaker and Baxter and the officers of the American Medical Association have commented on their completeness and quality and offered congratulations to the State Society for this work. These cards, some fifty-seven in number, are of 5 x 8 size so that they may be used by a speaker to compile his notes for addressing either lay or medical audiences. The information will be kept up-to-date by supplying new cards to take the place of the old ones as the more recent information comes to light. All the statements made on these cards show the authority from which received and can be used with perfect confidence by anyone so called upon to address an audience.

The Educational Committee under Dr. Charles Blair and with Miss Ann Fox, who is the full time secretary of this Committee and who has had the honor during the past year to be invited to become a member of the Illinois State Press Association, the Publicity Club of

Chicago, and the American Public Health Association, has produced very commendable results by their programs during the past year. They have sent out over 145 speakers upon request from all over the State, have put on radio programs, television programs, published health talks which have been supplied to hundreds of newspapers over the State and have been sent to various clubs and organizations as authoritative medical releases. They are to be congratulated upon the scope of their work and upon the newspaper publicity received for the Illinois State Medical Society and the public relations that have been evidenced by the requests from Parent-Teacher Associations, women's clubs, and various other educational organizations.

This report would be incomplete if we did not offer our congratulations to the Chicago Medical Society as one of our component societies for the broad results obtained by their Clinical Conference. Each year it is thought that the zenith has been attained and that it has been the biggest and best conference possible. But this year surpassed them all. Each program is full of information and is a complete refresher course for those who attend. During the Clinical Conference this year there was a total of 2,825 physicians in attendance, sixty-seven of whom came from foreign countries. The Chicago Medical Society is certainly to be congratulated on its evergrowing project.

Dr. Earl Blair, Chairman of the Committee on Military Affairs and Emergency Medical Service, which committee replaced the old Veterans Committee, has been very active all year, has had several conferences and attended the conferences at the American Medical Association March 21. The Chairman was a visitor to Philadelphia this year in order to get the details of the Philadelphia Plan which has been considered probably the most complete of all the plans to cope with catastrophic disasters.

The Illinois Public Aid Committee, under Dr. Everett Coleman, has been a good indication of what can be accomplished when the Medical Society joins forces with State organizations or commissions to work for the benefit of the needy public throughout the State. The Illinois Public Aid Commission has met on the Saturday evening previous to each Council meeting and has considered many cases over the State where the needy have been furnished care by the State funds. It is a pleasure to work with the Commission, and the Chairman of the Council has had the satisfaction of sitting in with each of these Commission meetings and having some voice in the decisions made.

The Wayside Press is still publishing the Illinois Medical Journal and Mr. L. E. Malley is most satisfactorily filling the office of business manager. Mr. Malley keeps his eyes open to all the different journals published throughout the country, making various trips down east and elsewhere to make personal contacts for advertising, and with his ability we feel that the Illinois Journal stands second to none in the Nation. During the past year more pictures have been published, a better grade of paper has been used, new general headings placed where old headings were inadequate, and several new departments have been introduced. The magazine at the

present time looks like a magazine, feels like a magazine, and needs no apologies from any source. The Council approved the selection of Dr. Theodore R. Van Dellen as Associate Editor of the Journal and his services were added to the editorial force as of April 1, 1949.

The Survey of the American Academy of Pediatrics, as presented by Dr. Poncher, who spent untold hours of hard labor in its production, presented a voluminous copy of the entire proceedings to the Council and it is now under consideration as to what are the best methods of its publication.

Some County Societies may wonder how their checks to the State Office have been handled for the payment of their assessment to the American Medical Association. This matter with the approval of the Council was taken up with Dr. Lull, Secretary and General Manager of the American Medical Association, who authorized that all checks sent to the Illinois Office be stamped "Paid to the National Bank of Monmouth, American Medical Association, Harold M. Camp," and deposited in a special account in that bank. As this fund accumulates in the bank the Secretary-Treasurer remits direct to Dr. Lull of the American Medical Association thus simplifying the bookkeeping both for the State, County, and the American Medical Association.

It may be noticed that due to the increased expenses and the many new demands made upon the cash balance of the State Society there is somewhat less in the Treasury at this time than usual. This is only a temporary affair and the Society is still completely solvent and able to take care of any obligations which may be drawn upon the Treasury.

Several of our down state doctors, including Dr. Coleman, have had long conferences with Senator Scott Lucas who has expressed his interest in the medical viewpoint of his home state physicians.

In making talks over the State, the Chairman of the Council has frequently asked the question, "Can anybody in the audience supply one name or one instance of refused or inadequate medical care?" and in the many instances only one such case has been supplied, and when that case was investigated it was found that the need, which was really not an emergency at all, was only for a period of less than five hours when ample medical care was furnished.

Several quarters over the State have asked for Council approval of Health Improvement Associations and inasmuch as this was in accord with the policy of the State Council such approval was granted.

Conferences with members and officers of the Illinois State Medical Society have been held with Whitaker and Baxter of One North LaSalle Street, Chicago, who have been employed by the American Medical Association and who are conducting a campaign of education throughout the country. We feel that their efforts are expanding and that the cause for which they were employed is under good supervision.

There is a meeting now under consideration which has had the approval of the Council in which fifty or more interns completing their training in the Chicago hospitals and who come from down state residences

will be invited to have dinner with officers and a committee from the Illinois State Medical Society. At this time they will have explained to them the advantages and methods of starting practice in the rural districts. They will be guests of the Society and we feel that this may encourage several of these men to locate in the distress areas down state, which are planned to be designated on a large map of Illinois by varicolored push pins.

Mr. Ed. F. Stegen has been of great assistance to the State in various capacities as a teacher of speakers, as a speaker at large gatherings, and has made a lasting and friendly impression everywhere he has appeared. The Council is very grateful to Mr. Stegen for his cooperation during the past year.

The work of the President, Dr. Percy Hopkins, this year has been both arduous and tiring, for, according to his reports to the Council, he has toured a large part of the State speaking on socialized medicine and voluntary prepayment health insurance. He has done a valuable work and has played a large part in the good will of our public relations.

Our President-Elect, Dr. Walter Stevenson, has done an outstanding work during the past year with the approval of the Council by bringing into closer relationship the ophthalmologist and the optometrist and we feel that there is better feeling being born as they are doing a happy work together in the schools where each, with respect for the other, is functioning for better health and vision of the school children of the State.

As Chairman of the Council, I wish to thank the various Councilors and the House of Delegates for their confidence in allowing me to preside over the Council during the past year. It has been a most enjoyable year and one in which those acquaintanceships which can be born only through service, hardship and hard work are by those same agencies welded into that form of friendship which last for life.

Respectfully submitted, HARRY M. HEDGE, M.D.,
Chairman of The Council.

REPORT OF THE COUNCILOR OF THE FIRST DISTRICT

The time has come for the Councilor of the First District to give his annual report to the Society.

This has been a quiet year in the district, as things have gone along with no dissention that has come to my attention.

Our membership has grown considerably, and particularly in the western portion, as several Doctors have located in the river Counties to fill a need that has been present for some time.

Last fall we had a very successful Postgraduate meeting at Rockford—with very good attendance, and a mighty nice program. We are now working on a Cancer Clinic to be held in Lake County, and plans should soon be formulated. These clinics are always well attended also.

At present we have two members of Kane County who are deserving of the 50 year button, and I expect to present them at the June meeting of the Society.

I have heard no serious complaint against the A. M.

A. assessment, and believe the Doctors in the district will co-operate quite fully with the program.

We have also had several contacts with lay organizations on Compulsory Health Insurance, and wherever we have appeared—have been received quite well. The big interest seems to be in the question and answer period, and that to me shows that at least the people in this district are beginning to think for themselves. When the problem is presented as to what it will cost them, and not entirely what they will get—they see it from a different viewpoint.

All told the District is in good condition.
Respectfully submitted, L. J. HUGHES, M.D., *Councilor First District.*

REPORT OF THE COUNCILOR OF THE SECOND DISTRICT

The Second Councilor District of the Illinois State Medical Society has enjoyed a healthy year. In my visits to the different County Medical Societies I have been impressed with the enthusiasm for the Scientific programs and the awareness of the members of the economic aspects of the present day practice of medicine.

The reception of the idea of a Speakers Bureau has been most encouraging, and I believe every County Medical Society in the District has formed at least the nucleus of a Speakers' Roster for their communities. In one County Society the effort is so diversified that it has extended to a joint meeting of the doctors, industrialists and attorneys in the community. In all my communication with the various County Medical Societies I have stressed the fact that the Speakers' Committee should include a great many lay personnel.

The assessment fee of the American Medical Association has, I feel, been fully explained in the District and has been accepted with whole-hearted cooperation.

We have had some local problems in our District. The Councilor has been made aware of them and I feel that through cooperation we will work them out.

I have enjoyed meeting with various County Medical Societies, and have found the work as Councilor interesting and stimulating. I am very happy to report that I feel the Second Councilor District is in an active and healthy condition.

Respectfully submitted, JOSEPH T. O'NEILL, M.D., *Councilor Second District.*

REPORTS OF THE COUNCILORS OF THE THIRD DISTRICT

The Third District has for its constituency 6,128 physicians, as of March 1, 1949, who in fifteen branch societies constitute the Chicago Medical Society, the Medical Society of Cook County.

Combined scientific and business meetings were held from October to May by each of the component branch societies. The Central Society likewise held scientific meetings during these months at the John B. Murphy Memorial where outstanding speakers addressed the Society members.

AMERICAN CANCER SOCIETY. The Illinois Division of the American Cancer Society, Inc., under the able direction of Dr. John A. Rogers, has been very active in Cook County during the past year. Several chapters have been organized within the city based some-

what upon the geographical distribution of the branches of the Chicago Medical Society. The program of professional education has been continued. A five day course was held during January, 1949 and the seventh cancer refresher course was given during the first week of April. This program was conducted at Northwestern University Medical School, the University of Illinois College of Medicine, Stritch School of Medicine of Loyola and Mercy Hospital, the University of Chicago School of Medicine and Michael Reese Hospital.

Cancer detection centers are located at the Women and Children's, Henrotin, Grant and Mercy Hospitals, the approximately 6,000 well persons will be examined in these centers during the period of a year. If pathology is found, a report is forwarded to the family physicians.

A cancer exhibit is being prepared for installation at the Museum of Science and Industry. This exhibit will carry the cancer story to the public and will be seen by hundreds of thousands of people each year.

ANNUAL CLINICAL CONFERENCE OF THE CHICAGO MEDICAL SOCIETY. The fifth annual clinical conference of the Chicago Medical Society was held at the Palmer House in Chicago, March 1-4, 1949.

A total of forty speakers and medical authorities including some of the foremost teachers in America appeared before the conference.

The total registration was 4,507. Chicago physicians in attendance totaled 1,973; out of town physicians in attendance totaled 852, making a total of 2,825 physicians registered. Allied professions (nurses, technicians, pharmacists, etc.) totaled 390.

There were 55 scientific and 617 technical exhibitors; guests, students, etc. registered, total 620. There were sixty-seven physicians from Canada and foreign shores registered. Thirty States from California to Virginia were represented. The General Chairman, Dr. Fred Muller, and Dr. Warren W. Furey who presided during Dr. Muller's illness, are to be congratulated.

THIS WEEK IN CHICAGO MEDICINE. The mailing list of This Week in Chicago Medicine has continued to grow. Hospitals and medical schools in Canada and Cuba have been added, upon request, to the original list. Many individual physicians, who have come to Chicago for special study or simply for vacations, have requested that they be sent the listings while guests in the city. It has been gratifying that physicians from other countries (including Spain, England, South America, and Canada) have used this service while in Chicago.

This Week in Chicago Medicine has been released weekly since its inauguration and has received favorable comment in the Journal of the American Medical Association, numerous city and state Medical Society publications, as well as hospital staffs and individual physicians from other states.

This weekly listing of the numerous medical activities in Chicago has demonstrated to the profession that Chicago is surely one of the great medical centers of the world.

VOLUNTARY PREPAYMENT MEDICAL PLANS. There are two accepted voluntary prepay-

ment medical plans operating in this District, namely (1) The Chicago Medical Service (Blue Shield) and (2) The Illinois State Medical Society Prepayment Plan.

(1) The Chicago Medical Service was organized in January, 1948. From the period of January until June, 1948, the contract and operative details were worked out. The first enrollment became effective for the Chicago Tribune group on June 28, 1948.

At the end of February, 1949 there were 66 groups enrolled in the plan. By the first of July, 1949, based on present indications, there should be well over 100,000 persons covered by Chicago Medical Service.

The average cost per case in running approximately \$45.00 at the present time and it is predicted that this will increase slightly as the enrollment increases.

The plan is operated on a non-profit basis and the Board of Trustees receive no pay for their services rendered.

(2) The Illinois State Medical Society Prepayment Plan has the following commercial insurance companies participating:

- a. Aetna Casualty and Surety Company, 120 South LaSalle St., Chicago.
- b. Illinois Mutual Casualty Company, Peoria.
- c. Metropolitan Casualty Insurance Company, G. H. Poulson and Company, 69 West Washington, Chicago.
- d. North American Accident Insurance Company, 209 South LaSalle St., Chicago.

It is estimated that there are about seventy-five or eighty thousand contracts in force in the State that have been written by these four companies. One of the companies recently approved by the Illinois Plan is especially active and earnest in its endeavor to provide a very extensive coverage through the State and is writing contracts on an individual basis as well as on a group basis. It is felt that this is a laudatory effort and will help considerably in solving one of the problems with which we have been confronted.

REPORT ON PLANS FOR A PERMANENT HOME. The plans for securing a permanent home for the Chicago Medical Society are progressing very favorably.

Special meetings have been held in two of our branches for the purpose of providing information and stimulating interest in the project. In both instances, the branch approval was given.

At the October meeting, the Council of the Society endorsed and approved a plan to levy a special assessment of \$125.00 to be paid over a period of five years. Since the A.M.A. assessment of \$25.00 was thought to have priority over other matters, notices of our special assessment were postponed and will be in the mail the first of June.

The need for this home becomes more and more apparent daily. The Institute of Medicine has indicated a good deal of interest in our project and, because of their need for additional space, might find the building suitable for their needs.

In 1950 our Society will be one hundred years old and

there still lurks the hope that something positive and definite might be done at that time.

COMPULSORY HEALTH INSURANCE OR NATIONALIZATION OF MEDICINE. A Committee on Medical Service was appointed by the Council of the Chicago Medical Society in December, 1948, with Dr. Warren H. Cole as Chairman. The Committee has adopted five major policies to combat Compulsory Health Insurance or Nationalization of Medicine, namely (1) encourage dissemination of information to doctors and their friends, (2) expand hospital and medical insurance, (3) take advantage of every opportunity (including speeches, literature, etc.) to inform our lay friends, (4) obtain resolutions from lay groups and (5) get everyone to write letters to Senators, Representatives and even the President of the United States.

A pamphlet containing factual data is being distributed to all the hospitals of the Chicago area for their distribution to the staffs.

Pamphlets are being prepared for distribution to patients in doctors' offices as a means of getting information to the public.

Each branch society has proceeded with a program of its own. The North Suburban and Aux Plaines Branches have perhaps taken the lead in their local campaigns, which consist of contact with local clubs and societies, and instructions about writing to Washington, etc.

The South Chicago Branch has developed a Speakers' Bureau with Dr. Harry Timm, a ward committeeman, as chairman. Their efforts are to be confined to the boundaries of the branch, which is a highly populated industrial area of many nationalities.

Dr. Cole and his Committee are untiring in their efforts in this worthy cause and they are to be congratulated.

COOK COUNTY FAIR. The Chicago Medical Society had an exhibit at the Cook County Fair at Soldier's Field August 27 through September 6, 1948. This was well attended and much interest shown by the lay people.

NUTRITION. The Second Annual Meeting on Nutrition, sponsored by the Chicago Medical Society and cooperating organizations, was held at the John B. Murphy Memorial Amphitheatre, Chicago, October 13-14, 1948. The program was planned to bring to the public information concerning all phases of nutrition with emphasis on health and economic aspects. An outstanding group of speakers was secured to present the program and to answer questions from the audience during the round tables at the close of the afternoon sessions.

POSTGRADUATE COURSES. A course in Hematology and Urology was given in September with 60 physicians attending from 16 different States. The second course in Cardiovascular and Respiratory Diseases was given September 20-25 with 84 physicians from 19 different States. Twenty-one physicians took both courses. Two courses are now being planned which will be given October 17-29.

COOK COUNTY HEALTH SERVICE. A special Committee from the Chicago Medical Society was ap-

pointed to study this Survey. The Committee has worked diligently through the past year going through a great mass of material and the recommendations which were made in the Survey.

CHILD HEALTH. The Parent Teacher Association with the voluntary help of Chicago physicians has for years sponsored the Summer Round Up, a program of physical examinations for primary school children. The Committee, headed by Dr. John L. Reichert, has reported to the Council of the Chicago Medical Society the progress which has been made.

A.M.A. \$25.00 ASSESSMENT. A large majority of the membership of the Chicago Medical Society have paid their \$25.00 A.M.A. assessment. Educational material is being sent to the delinquent members in the hope that they will see the light.

The Council has continued to support the efforts to reduce tuberculosis to a minor health hazard. The present movement along that line was started by the Chicago Medical Society in 1944. It has attracted the support of seventy-odd non-medical organizations now representing a very large segment of the State's population. This group was originally organized as the Chicago-Cook County Committee for the Eradication of Tuberculosis. Since the movement is now state-wide, the name has been changed to the Committee for the Eradication of Tuberculosis, or the Eradication Committee.

This organization illustrates what a great influence medicine can exert when it undertakes a positive health program. This matter is discussed at greater length in the report of the Medical Service and Public Relations Committee.

It has been a pleasure to have served on the Council the past year and especially so under the masterful guidance of the Chairman, Dr. Harry M. Hedge.

Respectfully submitted, OSCAR HAWKINSON, M.D., ARKELL M. VAUGHN, M.D., F. LEE STONE, M.D., WADE C. HARKER, M.D., HARRY M. HEDGE, M.D., H. PRATHER SAUNDERS, M.D., *Councilors Third District.*

REPORT OF THE COUNCILOR OF THE FOURTH DISTRICT

It is certainly a pleasant duty in reporting on affairs of the Fourth District to note that interest and participation on the part of members in County Societies has definitely increased during the past twelve months.

This district has for a long time found within its border several component Societies that have been very active throughout the whole time each year. There are two counties because of small membership that have no regular scientific meetings. The Physicians, members in these counties have attended adjoining county meetings, fairly well.

There are two counties within the Fourth District that have certainly stepped up their tempo and whereas heretofore, meetings of a rather desolatory character were carried on, today meetings with real sparkle and excellent scientific programs are well attended and looked forward to with unusual interest.

The knowledge of the individual physician in this district concerning the threat of Socialization has re-

ceived a great deal of attention during this year. The number and character of talks and addresses that have been arranged by the local Societies on this subject for lay groups is indeed quite gratifying. The value of the efforts of the individual Physician in enlightening the patient in his office each and every day has awakened great interest in the clientele. The number of physicians in the Fourth District who have put this plan efficiently into practice has been a great surprise and a great satisfaction.

It is very probably true that on the whole the lay population of this Fourth District has been at least awakened to the dangers to themselves of socialization of medicine. No portion of the district has been overlooked in the distribution of information and literature by the Physicians. The labor organizations, the farm groups, as well as other like bodies have been contacted at the level of their lowest units and considerable action against this menace as well as favorable sentiment for the continuation of individual enterprise has been the result.

It is with considerable pride that the district's status of practice has been such that no mal-practice suit has been entered in any court within the past twelve months. And in this connection it is to be remembered that this district includes the largest industrial centers outside of Chicago.

In Mercer County a new hospital is nearing completion with about 75 beds in Aledo. Also in Hancock County at Carthage, a new hospital is soon to be ready for use. These institutions will serve communities that have long been in need of such facilities.

The required examination of school children and of High School athletes has been a problem requiring considerable constructive planning throughout the district. For the most part the work has been carried out satisfactorily and with the idea of inculcating in the minds of the youth the fact that the medical man, making the examination, is interested in them as individuals, and is not just rushing them through of necessity. Each county unit has determined how the examinations in its schools shall be conducted.

Your Councilor has attended all the meetings of the Council of the Illinois State Medical Society and has been active as Chairman of the Educational Committee, and as a member of the Committee on Prepayment Medical Care Plans, and on the Committee on History. He has attended all meetings of the Council and has served as a member of its finance committee.

There are in this district 541 members of the Illinois State Medical Society, represented in the House of Delegates by 14 delegates. In this district there are a few practising physicians who are not members of the State Society.

Your Councilor desires to express his appreciation and sincere thanks to the officers of the eleven component societies and to their individual members for their expressed and manifested cooperation in all activities. It has been a very pleasant duty to be associated with the members of the Council and with the members of the various committees. The benefits acquired by the Councilor as an individual are fully recognized and it is his

hope that these have been reflected, at least in a small degree, to the individual of the district for the more enjoyable practice of medicine.

Respectfully submitted, CHARLES P. BLAIR, M.D., *Councilor Fourth District.*

REPORT OF THE COUNCILOR OF THE FIFTH DISTRICT

It is evident that many changes are occurring in medical practice throughout the country. Whether or not these changes will prove beneficial only time will tell. In the Fifth District physicians are busy and hospitals are overcrowded but there is no real shortage of physicians. With very few exceptions all communities seem to have as many or more physicians than before the war. More of the younger men are entering the specialty fields without previous experience in general practice. Medical society meetings are held regularly except in some of the counties where the membership is small. A Postgraduate Conference was held in Pekin in December with an excellent program and good attendance.

The assessment for the benevolent fund is being paid without objections. Certainly the profession should be willing to contribute to an endowment fund for those few members and their families who are in actual need of financial help. The assessment for the American Medical Association is being paid promptly and with very little objection. Some members think the plan is good but may be too late. The profession stands firmly opposed to compulsory health insurance yet is reluctant to carry on an aggressive campaign against the measure. Some definite program of instruction of senior medical students in problems of general practice should be undertaken by the medical colleges. More definite training in medical economics would be desirable.

The committee on Rural Health is doing a new and constructive piece of work. We should give our support to this work. If it can win the support of the farm organizations it will have made a valuable contribution to the profession. The profession needs the support of the public if we are to maintain our liberty and freedom in the practice of medicine. This can best be achieved by educational means.

Three counties in the Fifth District, McLean, DeWitt and Montgomery, now have county health departments. By active support of these county units the profession can help itself and the public. More and more the public is becoming health conscious and the profession should guide the program of instruction along that line. Since physicians are reluctant to educate the laity in matters of health great good can be accomplished through the health educators of the county health departments. The health educator is usually a college graduate with a master's degree in public health. Such a person has abundant opportunity to contact women's clubs, luncheon clubs, school teachers and various organizations. If the profession will give hearty support to the local county health units much good can be accomplished.

Respectfully submitted, RALPH P. PEAIRS, M.D., *Councilor Fifth District.*

REPORT OF THE COUNCILOR OF THE SIXTH DISTRICT

The good fortune of having President-Elect Stevenson in this district with his wide acquaintance and close contact with the physicians and their activities has made it easier for the present Councilor. Interest in the program of Organized Medicine in maintaining its position and integrity is high. Many County Societies have held special meetings on this subject. Special procedures to acquaint the general public with the realities of the situation have been carried out by some societies, notably Pike County. Increased activity in this respect is anticipated.

The Councilor has attended meetings in all but two of the counties. He hopes to make those before the Annual Meeting. Special scientific programs over the District, such as the Postgraduate Conference at Alton June 3, the Symposium on Heart Disease at Quincy November 4, the Cancer Symposium at Jacksonville March 31, and the Postgraduate Conference at Quincy April 14, have all been well attended thus manifesting interest in the professional gatherings. Individual county meetings attended have had excellent programs. The dinner for President-Elect and Mrs. Stevenson at Quincy July 10 was the highlight of the social side though the opportunity to take part in other social gatherings of doctors both at the time of meetings and otherwise has been appreciated.

The Councilor is looking forward with pleasure to the further association with the officers and members of the Council and with the members of the local societies during the remainder of his term of office.

Respectfully submitted, F. GARM NORBURY, M.D., *Councilor Sixth District.*

REPORT OF THE COUNCILOR OF THE SEVENTH DISTRICT

It is a pleasure to report that during the past year the interest in organized medicine has increased materially in the eleven component county societies of the seventh district. Most all of the county societies have had regular monthly meetings, and have been quite active in both the scientific and economic problems of medicine. Being leaders in their communities, the members of the County Medical Societies have assisted greatly in the education of the laity on compulsory sick insurance. In some of the counties having smaller membership, the scientific meetings of the larger counties were well attended by them on invitation and were much appreciated. There are areas in the district where the need for additional hospital beds is great and many of the people hope the State Legislature will again make it possible to vote a tax to supply their one-third to build the needed beds and support them.

As Councilor, I have attended practically all of the meetings of the Illinois State Medical Society. The outstanding activity in the district the past year was the Postgraduate Conference at Centralia; the attendance was good; the program excellent; the speakers were well received by an enthusiastic audience. Marion County Society was a perfect host and entertained the attending physicians royally. Many expressions of commendation were received by those who attended. Your Councilor has attended a meeting of each county

society which has regular meetings, and to which he has been invited. The County Societies have functioned quite smoothly and only minor problems have required the assistance of the Councilor, who wishes to express his thanks to the officers of the component societies for their support and cooperation during the past year, and hopes the entire membership will continue their interest both in scientific and economic medicine.

It has been a great pleasure to serve as Councilor representing the Seventh District and to have met members of the various component county societies, and to be associated with members of the Council.

Respectfully submitted, C. H. HULICK, M.D., *Councilor Seventh District.*

REPORT OF THE COUNCILOR OF THE EIGHTH DISTRICT

The individual county medical societies making up the Eighth Councilor District have all been extremely active during the past six months. The number of members has increased with newly arriving practitioners in the various counties. Nearly every county has made a very considerable effort to educate the citizens along the lines of the dangers presented by the enactment of compulsory health insurance. Public meetings have been held in Coles County, Champaign County, Douglas County, Vermilion County, at which times the implications of this type of legislation were explained. Many groups have been addressed by members of the profession, and our citizenry seems to be alert to the dangers involved. There has been very little hospital construction in our district during the year. More convalescent beds have been put in use.

The county advisory committees to the Illinois Public Aid Commission and other agencies spending public funds have been active, and to my knowledge not too much difficulty has been experienced in dealing with political subdivisions.

The Postgraduate assembly for the Eighth District was held in Danville on April 21 and an excellent program was presented.

Numerous men completed their fiftieth year in the practice of medicine and were awarded their fifty year gold certificates. Nearly all the physicians willing to work have had plenty to do, and except for two or three spots where additional personnel would be convenient there are no areas in desperate need of medical personnel.

Respectfully submitted, HARLAN ENGLISH, M.D., *Councilor Eighth District.*

REPORT OF THE COUNCILOR OF THE NINTH DISTRICT

All county societies of the Ninth District are functioning well. Meetings are held regularly, the attendance is good, and the programs have been excellent. The membership is at an all time high for this district.

With two exceptions, every society in the District has been visited. Some have been visited several times. I have urged the members to pay their A. M. A. assessment and some of the counties of this District are making their payments 100 per cent while others are near the 100 mark. I have also urged that they prepare their biographical forms for the historian.

We have had some very good meetings in this District during the year. An excellent Postgraduate Conference was held at Harrisburg on September 21, 1948 with a good attendance and a fine program. The Saline County Society is to be congratulated on this fine meeting.

The Southern Illinois Medical Association also had their annual meeting in the Ninth District which was held at Benton on November 4, 1948. They, too, had an excellent program with a large attendance.

There was a meeting at Mt. Vernon on October 15, 1948, celebrating the "Ground Breaking" for a one hundred bed tuberculosis hospital launched by the State of Illinois through the Public Health Department and is the first hospital of its kind to be built by the state. A tuberculosis hospital has long been needed in this section of the state. There was another important meeting held at Mt. Vernon, too, just recently on Rural Health Education, which was arranged and carried out by Dr. Harlan English and his committee.

The Six County Medical Society was entertained twice during the year by the Williamson County Society, also twice by the Franklin County Society. This Society continues to grow in interest and attendance.

A one day Cancer Symposium was held at Herrin on May 2, 1948 and was an outstanding meeting in interest and attendance. Another meeting of the same type is to be held again this year on May 26. The Cancer Clinic at Herrin is doing wonderful work and is serving a large territory here in Southern Illinois.

I wish to express my appreciation to the officers of the component Societies for their cooperation and assistance during the past year.

Respectfully submitted, C. O. LANE, M.D., *Councilor Ninth District.*

REPORT OF THE COUNCILOR OF THE TENTH DISTRICT

The strength of organized medicine is shown by the way the membership enters into the activities of their medical societies. I wish to express my appreciation to the members of the Tenth District for their response to the assessment made by the A. M. A.

The number of meetings and attendance have been about the same as last year. We have a few counties with small memberships and are having difficulty arranging meetings and for these counties I suggest joint meetings for the scientific assemblies, each holding their county business meetings in their individual groups. There has been quite an increase in the memberships in some of our county societies, yet in some districts there are not sufficient doctors to give the people adequate medical care.

In the survey by the Department of Public Health of our State on the Community Hospital needs, the Tenth District ranked first in hospital needs and already three communities have started their hospital construction programs, namely Anna, Red Bud and Cairo.

Two students of the Tenth District (Randolph County) and one from Pulaski County have been chosen to receive student loan funds to finish their medical educations. The loan fund is sponsored jointly by the Illinois Agricultural Association and the Illinois State Medical

Society. Under provisions of the loan fund, those selected must promise to practice at least five years after their internship in the community or county that sponsored them.

The enthusiasm of the Six-County Group is still running high and they are holding regular meetings with excellent programs.

I would like to express my appreciation and thanks to the doctors of St. Louis who have given so much of their time and knowledge in the presentation of scientific papers, which make the meetings in the Tenth District very outstanding. The same can be said for the men in Chicago who have been sent to us by the Educational Committee.

Another sign of the times is the organization of several Chapters of the American Academy of General Practice in this district.

In conclusion, I wish to say I am proud and grateful for the privilege of serving the members of the medical profession of Illinois and our Tenth District.

Respectfully submitted, G. C. OTRICH, M.D., *Councilor Tenth District.*

REPORT OF THE COUNCILOR OF THE ELEVENTH DISTRICT

It is with great pleasure that your Councilor reports that conditions of the Component Societies in this district are excellent. All of the Counties have regular meetings and the members show great interest in the problems of the profession.

As most of you know, your Councilor has taken on some additional work, however his interest in the State Society has not lessened and he has given approximately the same amount of time as before this additional work. He has attended the meetings in different County Societies as requested and has been available at all times. In addition he has attended practically all of the meetings of the Council and meetings of the Committee on Medical Service and Public Relations, the Committee on Medical Care of Public Assistance Recipients, and Prepayment Medical Care Plans.

It is with considerable regret that your Councilor reports that there was no Postgraduate meeting held this year in this district. But two societies approached did not feel that they wished to take on an additional meeting prior to the meeting in May. In accordance with their wishes the conference will be held in either DuPage or Will County early in the fall. Attempt is made to distribute these meetings in different parts of the district. Last year the meeting was held in Kankakee and Kankakee desired to hold it again this year but it was not thought advisable to repeat so soon.

There has been some difficulty with Medical Care of Public Assistance Recipients in one of the counties. Dr. English and myself attended a meeting with the County and both believe that the difficulty will be quickly cleared up.

Your Councilor wishes to express his thanks to all of the Component Societies for cooperation in the past year. He urges them to lead in the fight against Compulsory Health Insurance in the County Society as well as in the Illinois State Medical Society.

Respectfully submitted, E. S. HAMILTON, M.D., *Councilor Eleventh District.*

REPORTS OF THE COUNCILORS AT LARGE

Your Councilor-at-Large has had a very busy year due to many commitments from the previous year and the activity on special committees. Have attended all the meetings of the Council as well as the various committees to which he was assigned.

The major emphasis of your Councilor has been directed to the activities of:

1. As Chairman of the Committee on Venereal Disease Control.
2. As a member of the Advisory Council of the Illinois Division of the American Cancer Society.
3. The Advisory Hospital Council of the State Department of Public Health.
4. As member of the Executive Committee of the Council of the Illinois State Medical Society.

The scope of the activities of these committees have furnished ample opportunity to study at close range the present trend of the Federal Government in an effort to control the medical affairs of the United States through the establishment of a "Welfare State" and an enlarged Social Security Department to be under the control of the Social Security Administrator with cabinet status.

Much of our efforts the past year have been productive of more heat than light. The fight is not yet won. It will require a more vigorous and better synchronized campaign in which the entire membership of organized medicine must be enlisted, in order to accomplish the ends desired.

Respectfully submitted, IRVING H. NEECE, M.D.,
Councilor-at-Large.

The past year has witnessed a tremendous increase in the activities of the State Medical Society. These have been necessitated by the changing political and economic situations in the state and country and by the increase in Federal attempts to regulate the public through the medical profession. In line with this the activities and responsibilities of the Council have been correspondingly increased. As Councilor-at-Large my responsibilities have been more in the line of committee activities rather than with work in the Fourth Councilor District which I once represented.

All meetings of the Council have been attended and also meetings of a great many other committees, a number of which have been on the same weekend with the Council Meeting. Most of these committee activities will be discussed separately under the reports of the various chairmen of these committees but they consist in part as follows:

Medical Service and Public Relations.

Professional Demeanor Committee.

Advisory Committee to the State Commission on the Care of the Chronically Ill.

Advisory Committee to the Illinois Public Aid Commission.

In addition to these, membership has been maintained in:

Advisory Committee to the Illinois Department of Health's Committee on Hospital Construction.

Advisory Board to the Division of Cancer Control of the Department of Public Health.

Professional Advisory Committee of the Illinois

Division of the American Cancer Society.

It is felt important that members of the medical profession be adequately represented in these outside groups which have a great deal to do with medical problems.

Again referring to the problem of threatened socialistic legislation in Washington, attention should be called to the meeting recently held in Chicago analyzing the threat of the Wagner-Murray-Dingell Bill and methods which should be used to combat it. In this respect the profession should be reminded again and again of the importance of the doctor taking part in health affairs in his local community and developing medical leadership in all matters that have to do with public health. Incidentally in many other allied activities it is necessary to present the medical viewpoint at the local level and it is felt that this has been done very satisfactorily in many communities throughout the State.

Your Councilor has addressed literally dozens of small groups as well as a few large ones in numbers varying from 25 to over 200 in attendance and it has been found that when the medical viewpoint in reference to threatened Federal legislation is explained to the public that they are on our side and definitely opposed to any such legislation. They do not want any interference with their private choice of physician. I feel that at least in the rural areas of the state there is no demand for this type of legislation and a great deal of opposition to it. Almost all these organizations have voted to send resolutions to our representatives in the House and Senate asking them to oppose it. Incidentally one Senator has replied to these resolutions by sending some Federal Security Agency propaganda back. This propaganda sheet contains half-truths and deliberate misrepresentations and some organizations are already replying to the Senator calling his attention to these discrepancies and deviations from the truth.

Another recent problem is that of labor organizations wanting to have certain types of health and hospital care as part of their contract with the employer. The first and most comprehensive of these movements is that made by the United Mine Workers in their Retirement Health and Accident Fund which has now reached very considerable proportions financially. This fund is already being used for disabled miners and their dependents and employed miners are eligible to its benefits for major surgery. The plan is to be extended within six months to include all miners, employed or unemployed, and their dependents. According to reports received some time in the past it was thought their intention was to employ doctors on a full time basis and to construct their own hospitals and a certain amount of this may be done in some parts of the country. But the plan as applied to Illinois is said to have three objectives; to give adequate high grade care to the miner and his dependents, to have the medical profession receive reasonable return for services rendered, and to keep the Federal politicians out of it. The Welfare Fund Advisory Committee has recently asked the State Medical Society to appoint an Advisory Committee to see if some of the problems which will of necessity arise in this type of a new program can be solved

with a minimum of difficulty. The State Society has of course been glad to cooperate and the coming year will demonstrate what success has been obtained. The impression of those who are interested in this is that it is an excellent opportunity for the medical profession and organized labor to get together on a common ground and to have at least one labor organization which will be opposed to Federal intervention in the practice of medicine. The members of the medical profession are well aware of the fact that once medicine is regimented a similar treatment will be given to business and labor but many of the outstanding labor leaders have failed to grasp the significance. If by personal contact, we can show labor members that their problems and ours are practically identical we will have many more friends on our side in the coming legislative battles. It is hoped that this will bring about a continued and closer cooperation with the miner's organizations and the organized medical profession. Also that it will enable the miners to see that for the furtherance of their own program complete freedom from Federal intervention is necessary. It is quite probable that an arrangement can be made which will be satisfactory to both the miners and the doctors and to our mutual benefit.

This report marks the end of my membership in the Council of the State Medical Society and in retrospect it seems amazing to realize that twenty years have elapsed since I was first made a member of the Council. These years have marked a steady growth in the size and achievements of the Society. They have been during a period when an unbelievably large number of outstanding scientific achievements in medicine have been attained and they may even represent the "Golden Age" of the practice of scientific medicine in this country. Whether the years gone by represent this period or whether the real "Golden Age" of medicine is in the coming years depends very largely on whether or not Federal intervention can be avoided and this will depend to a great extent upon the degree of activity which the doctors of the state apply at the local level.

Respectfully submitted, E. P. COLEMAN, M.D.,
Councilor-at-Large.

Once again it is my privilege to report to you as Councilor-at-Large concerning activities of interest to the House of Delegates and to the membership at large.

(1) May of this year completes my second year of a five year appointment by the Mayor of Chicago as a member of the Board of Education. This Board is composed of eleven members, of which two are women—and only one member is a physician. Quite obviously this imposes upon me a grave and important responsibility and makes me the champion or mouthpiece of the medical profession, and the guardian of the various and sundry measures which continually arise concerning child health. It has been my pleasure during the past year to cooperate with Dr. John L. Reichert, the chairman of the Chicago Medical Society Committee on Child Health. I cannot stress too strongly my desire to be of assistance not only to this important committee

of the Chicago Medical Society but to Dr. George L. Drennan's State Committee as well.

(2) During the past year, I have served on a number of committees such as the Committee to Study Alcoholism, B. C. G. Vaccine, etc., and I continue to be impressed with vast amount of time members of our profession are devoting willingly to public health and public welfare matters.

(3) Finally as Councilor-at-Large, it has been my good fortune to attend practically all meetings of the Council of the Illinois State Medical Society and to participate in the varied and sundry matters which come before that body.

Respectfully submitted, ROBERT S. BERGHOFF,
M.D., *Councilor-at-Large.*

REPORT OF THE EDITOR

During the past year the *Illinois Medical Journal* has appeared in the mail and in your offices earlier each month than for a number of years. The March issue was in the mail on the 14th of that month, principally because the material for that issue was sent to the printers a few days earlier than usual.

The dead line, however, for material to appear in the issue of the following month, is the 14th, and it is much better to get all material to the Editor's office by the first of the month if it is to appear in the *Journal* for the following month. We receive reports each month which should be published, but unfortunately they arrive too late for the next issue of the *Journal*, and they are of but little value in later issues. Notices of meetings which are to be held should be received well in advance, if they can best serve the purpose through publication in the *Illinois Medical Journal*.

Some changes have been made in the appearance of the *Journal* during the past fiscal year—new headings, better paper, and some other changes which the *Journal* Committee believes has improved the publication as a whole. The Editorial Board and *Journal* Committee have held joint meetings at which time serious consideration has been given to the various problems which have been presented. It is still the general opinion that joint meetings are of great value, and do increase the interest on the part of both groups.

Following the last annual meeting the *Journal* Committee was given the responsibility of selecting and recommending to the Council a member to be designated as Associate Editor of the *Journal*. At the regular meeting of the Council in March, the *Journal* Committee recommended the appointment of Theodore R. Van Dellen, Chicago, for this position. The Council, by unanimous action, immediately approved the Committee's recommendation, and Doctor Van Dellen assumed this position on April 1.

Doctor Van Dellen has been Medical Editor and Medical Director of the Chicago Tribune since 1945. He is attending physician on the staff of several Chicago Hospitals, Associate Professor of Medicine, and Chief, Cardiac Clinic, Northwestern University Medical School. Doctor Van Dellen is a member of numerous medical and scientific organizations. He is intensely interested in the work of this Society and its *Journal*,

and as Secretary, then Chairman of the Section on Medicine, he was largely responsible for the arranging of the fine scientific programs which were presented at the 1947 and 1948 annual meetings.

The Journal Committee, being responsible for the acceptance of advertisements published in its columns, has given much thought and consideration to this important subject during the past year and the Committee has been most careful in the selection of new accounts. All actions of the committee, are subject to the approval of the Council, and up to now, so far as we can ascertain the recommendations of this committee have invariably been approved.

Many papers have been submitted for publication during the past year, and efforts have been made to select those of greatest general interest to the readers of the *Journal*. Unfortunately, however, many of these papers are too long, and frequently they have to be returned to the author asking that they be shortened. It is not advisable to publish extensive bibliographies with the paper, and it is rarely advisable to have several paragraphs of historical information, all of which is available to those desiring the information from other sources.

Bibliographies and other material can appear in the author's reprints, however, which information is given to the many inquirers regularly. It is the desire of those responsible for publishing the *Journal*, to publish in each issue as many papers as possible and likewise try to refrain from publishing too many papers by the same author during the year.

Short but interesting case reports are always desirable and are of much interest to the readers. Efforts are made to publish two case reports each month, so once more we ask for more case reports for publication.

County Society and Branch Society Secretaries are urged once more to send news items concerning their meetings, and other information of general interest to the membership of this Society. Information of this type will be published in the "News of the State" department regularly.

Once more we desire to call to the attention of the members of the Illinois State Medical Society the awarding of prizes for the best articles or scientific editorials published during the year. These are of two classes:

1. The best written article from a literary and scientific standpoint.
2. The outstanding piece of original work as presented in a paper or scientific editorial.

The Editorial Board and Journal Committee jointly review all papers and editorials published during the year, and make the selections for the two awards, following a plan which was adopted two years ago.

The *Illinois Medical Journal* is the official publication of the Illinois State Medical Society, and the Council under the By-Laws is responsible for its publication. It is the *Journal* of the members of the Society as a whole, and your suggestions and criticisms are solicited, and will be referred to the Journal Committee and Editorial Board for consideration at the joint meetings.

Mr. L. E. Malley, as Business Manager for the *Journal* during the past eight years, has been in charge of all business matters in connection with our *Journal*. His work has been outstanding and he is always anxious to receive instructions as to his duties and responsibilities. He meets with the Journal Committee and Editorial Board, and is always highly cooperative, and his desire like others in the *Journal* set-up, is to produce each month a better *Journal*.

Your Editor once more desires to thank the Editorial Board and the Journal Committee for their assistance and encouragement, and likewise the interest each of these men have maintained in their duties and their obligations to the Society and its Council to whom they are directly responsible.

As we have stated previously, all those who are interested in the publishing of the *Illinois Medical Journal* are always anxious to receive criticisms, or recommendations from this House of Delegates, and you may be sure that your suggestions will promptly receive a most serious consideration, for it is a mutual desire to publish a *Journal* which will be a credit to a fine Society and which will be of general interest to all its members.

Respectfully submitted, HAROLD M. CAMP, M.D.,
Editor.

REPORTS OF STANDING COMMITTEES

REPORT OF THE COMMITTEE ON MEDICAL SERVICE AND PUBLIC RELATIONS

The report of the various councilors and committees and of Dr. Percy E. Hopkins, the president, and Dr. Walter Stevenson, the president-elect, must have made it clear to members of the House of Delegates that public relations activities of this Society are being carried out on many fronts and by many members.

This committee has been busy with the tasks that came within its immediate purview, but Mr. John W. Neal, executive secretary, and Mr. James C. Leary, director of the Bureau of Public Relations, have been actively engaged in assisting other committees, councilors and the officers in tasks that fell to them or which they had the vision and foresight to assume.

It is not feasible to point out by name all who have busied themselves making friends for the profession or extending its fields of usefulness and service to society in general. However, particular attention should be called to the activities of Dr. Hopkins and Dr. Stevenson; Dr. Everett P. Coleman and the advisory committee to the Illinois Public Aid Commission are to be particularly commended. The Committee on Rural Medical Service under Dr. Harlan English has brought us closer to the agricultural interests of the state so that we understand their problems better and they realize that we are trying to help solve them within the framework of a free society, in order that both agriculture and medicine may be saved from the security police state envisioned by the federal planners.

The Committee on Voluntary Prepayment Insurance under Dr. Hopkins is seeking to work out with labor some prepayment plans agreeable to both parties. Labor is interested, as we are, in seeing that medical care of

the highest quality is furnished to its members and wants a plan that will provide such care without allowing the slimy hand of the Washington bureaucrat to control it. The Educational Committee, under Dr. Charles P. Blair, and its secretary, Miss Ann Fox, have maintained established functions at high level and added new ones, such as television, to the health education armamentarium.

The chairman has continued activities in connection with efforts to reduce tuberculosis to a minor health hazard in Illinois. We have found the public for most part willing to work with us.

Originally some 70 non-medical organizations, including various branches of organized labor, numerous women's groups and social agencies, joined with the tuberculosis control committee of the Chicago Medical Society to form the Chicago-Cook County Committee for the Eradication of Tuberculosis. The task of eliminating tuberculosis is much greater than the medical profession alone can accomplish and, in addition, the problem concerns every other member of society as much as it does the physician. The idea of forming such a committee originated with Mr. Leary, and he took an active part in its establishment. Eventually the committee's activities became statewide and, as its membership spread, the name was shortened to The Committee for the Eradication of Tuberculosis.

As has been previously pointed out, the record of the State of Illinois in tuberculosis is peculiar. Because of legislative decisions made 40 or more years ago, control is vested in individual counties and the state as such has done almost nothing. County resources have been shown to be often inadequate, despite good work done in certain areas, and the problem has been partly one of persuading the state to play a more active part in the control of this disease. A great deal has been accomplished, with the cooperation of Dr. Roland R. Cross, director of the Illinois Department of Public Health, and the individuals and organizations making up the Eradication Committee.

The 65th General Assembly appropriated funds for new hospitals at Mt. Vernon, Savanna and Chicago. Work has been begun on the Mt. Vernon and Chicago institutions; the Savanna plan has been abandoned.

The suburban Cook County district—the semicircular area containing some 750,000 persons, hitherto unbelievably without a tuberculosis program—has now voted itself into a tuberculosis control district with an annual budget of about \$1,500,000 and last November approved by a two to one vote a \$6,000,000 bond issue to build hospitals. This vote, running counter to the widespread demand for tax reduction, indicates clearly how willing the general public is to follow sound medical programs proposed by organized medicine, if the problem is properly explained.

Meanwhile the tax levy of the Chicago Municipal Tuberculosis Sanitarium was increased 50 per cent and, more recently, the hospital has been thoroughly reorganized with the support of the Mayor of Chicago, the Honorable Martin H. Kennelly, and the Chicago Medical Society.

The program presented to the 66th General Assembly this year is in part incorporated in the budget of the Department of Public Health and enjoys to a certain extent the support of the administration. A representative group from the Society has presented the problem and the program in two conferences with the Governor of Illinois, the Honorable Adlai E. Stevenson. In general, this program includes provision for additional hospitals in Chicago and downstate, a state aid fund for counties unable to take care of their own problems and additional money to permit existing tuberculosis hospitals to expand their buildings or facilities to care for additional patients. It is too early at this date to predict just how the program will fare in the General Assembly. In any event, however, the lesson so far learned is that continued pressure by responsible organizations led by organized medicine will eventually produce sufficient funds to control tuberculosis. The lesson may well be applied to other problems.

THE NATIONAL EDUCATION CAMPAIGN. The Bureau of Public Relations in the last five months has concentrated largely on the Illinois phase of the National Education Campaign against socialization of medicine. Other activities have not been lost sight of, certainly, but the need is great for setting the Illinois program in motion, with all the wide range of new activities entailed. With the organization and training work completed, other activities will be re-emphasized.

A brief review will make the situation clearer. After the election of Nov. 2, when administration spokesmen were boasting of their "mandate" and promising compulsory sickness insurance, certain decisions were reached by the trustees of the A. M. A. regarding the need for action. These decisions were approved by the House of Delegates at the St. Louis interim meeting early in December. They included especially the \$25 assessment and the employment of a national public relations counsel to organize and direct a National Education Campaign, together with the appointment of a coordinating committee from the A. M. A. officers, trustees and delegates.

While the broad outlines of the campaign were being formulated, headquarters established and a staff assembled, the officers of the Illinois State Medical Society called a meeting to formulate Illinois' role in the effort.

This meeting, held in Springfield Dec. 12 and probably the first such state meeting, successfully alerted county and branch officers to the task that would be imposed on them. A waiting period ensued. The national program was outlined by Whitaker & Baxter Feb. 12 in Chicago at a session attended by representatives of all state societies.

Immediately a second Illinois meeting was called for Feb. 27 in Chicago at which the whole program was interpreted by a series of speakers at the state level to representatives of county and branch societies.

The program of action rests in the last analysis on (1) speakers to reach every possible individual and explain the danger of socialization (2) pamphlets to reinforce that message and spread it further (3) resolutions condemning the compulsory insurance scheme by all in-

interested organizations and (4) individual letters from as many voters as possible expressing to senators and congressmen their disapproval of the scheme.

To meet the need for speakers several steps have been taken. First, a recruiting campaign has been started, seeking out competent speakers to be supplied with material and sent out as "minute men" to any audience large or small at any time. The response was generally excellent. Nearly 250 speakers all over Illinois had been lined up within 30 days.

Next, to meet the need for training and indoctrinating them, as well as providing them with exact information, Mr. Leary devised a set of "speaker's notes," mimeographed on pocket-sized cards. On these cards, the various data necessary to intelligent and accurate presentation of the subject were abstracted for ready reference and to save our speakers the time that would be required for research through the tremendous mass of available material. At the same time, new cards can be readily supplied, after the fashion of a loose-leaf encyclopedia, to answer new arguments brought forward by our opponents, to cover additional material on our side of the controversy or to substitute as later data became available or the bill S-5 is amended.

That these cards filled a deep need has been demonstrated by their reception. Not only did our own Illinois speakers find them immediately useful, but, as word of their existence got around, state after state asked for samples. They were freely supplied until more than twenty societies from Massachusetts to Hawaii and from Florida to Oregon had obtained them. Many followed up the first request with appeals for quantities up to 100, offering to pay for them. These have also been supplied at cost (approximately \$1.00 per set). Other states asked for permission, which was readily granted, to adapt the notes to their own situations and reproduce them in quantity. From an original printing of 200 sets, the total rose rapidly to 700.

Meanwhile the task of setting up an intraoffice method of processing requests for speakers was undertaken. Careful records of all speaker's card-holders are kept for distribution of new or substitute cards. A permanent record of every Illinois speaker, the talks he delivers and any resultant action is filed on printed cards. A daily record of scheduled speakers is also maintained to prevent overlapping or confusion.

Long before this was accomplished, requests for speakers began to pile up and during March more than 40 meetings were organized. Many more of course were set up by individuals and, unfortunately, never reported. The flow of resolutions by interested organizations has also begun into the secretary's office. All meetings should be reported to the speakers' bureau, while resolutions should go to Dr. Camp.

At the same time, the continuing effort was begun to establish contact with all organizations holding conventions in any city of Illinois with the purpose of obtaining from them resolutions condemning socialization. Form resolutions were supplied by Whitaker & Baxter. There is no way to tell how many letters from individuals have gone to Washington, but the number must be large.

To date, it has been necessary to use existing pamphlets ("The Illinois Plan" and "The Blue Shield Plan" on prepayment insurance and "Doctors and Horses" on rural medical care) together with various reprints and leaflets available from the A. M. A. and the National Physicians' Committee. However, as the saturation point of such material is reached, new material will be ready from the Bureau of Public Relations, while Whitaker & Baxter, the A. M. A. and N. P. C. will have still more.

It is also planned, as soon as the first flush of requests for speakers shall have spent itself, to undertake a program of further stimulation of demand.

RURAL MEDICAL CARE. At the direction of Dr. English, the public relations counsel has publicized widely the three main events in the program of activities set up by The Committee on Rural Medical Service. First was the establishment of the Joint Medical Student Loan Fund by the Society in cooperation with the Illinois Agricultural Association, with the subsequent selection of three students for the first loans. The several news stories released on this series of events were probably printed in nine out of ten of the 800 or more daily and weekly newspapers of the state.

In addition to the press and radio of Illinois, which of course was our main objective, the story of this Fund was widely printed outside the state, and, in fact, all over the world. At least, Dr. Harold M. Camp, secretary, received one inquiry from Africa, where a young student insisted pathetically that, since one requirement of eligibility was being a native of one's home county, he was entitled to a loan since he is a "native." Both United Press and Associated Press found the Illinois program of extreme interest and also carried additional news stories developed by themselves with the assistance of Mr. Leary.

The Society also fared well with the series of releases centering around the selection of Dr. Lee T. Hoyt of Roseville as the state's outstanding general practitioner for 1948. In addition to several news releases widely used within the state, the Associated Press sent a photographer to Roseville for a series of pictures illustrating the life of a country doctor. These pictures were taken in March, but were not distributed until late October, just before the interim meeting of the A. M. A. House of Delegates at which he was *not* chosen as the national outstanding general practitioner.

In February of this year, Dr. Hoyt again cooperated with the bureau in permitting a tape-recording of his work which formed the basis of a seven-broadcast radio series on the country doctor on the "It's Your Life" program. Dr. Charles P. Blair, Dr. J. O. Firth, Dr. Camp, Mr. William Axline, Roseville druggist, and Mr. Fred Molgren, Monmouth General Hospital administrator, also aided on this project.

Two conferences on rural health problems set up by Dr. English at Mt. Vernon and Peoria also provided material for several more news releases on the Society's contributions to improvement of rural medical care. These releases were printed in practically every paper in the state, and enjoyed wide acceptance among the radio stations.

A new printing, with slight re-editing, of "Doctors and Horses," was forced to meet the demand for it, which still continues, though it has been in circulation since November, 1947. The A. M. A. has obtained and distributed several thousand of these pamphlets throughout the country. A total of 30,000 has now been printed.

Production of a new pamphlet bearing directly on socialization of medicine as it would affect rural medical care is now being planned, under Dr. English's direction.

The bureau also set up an exhibit which became part of the exhibit staged by the A. M. A. Committee on Rural Medical Service at the Annual meeting of the A. M. A. This illustrated the problems of rural medical care in Illinois and the 10-point program devised in Illinois to meet them.

OTHER ACTIVITIES. The level of public relations activities since the last annual report (April 1, 1948) was high at the beginning of the new year and rose rapidly after November 2, as indicated. The director of the public relations bureau, for instance, attended approximately 65 committee meetings or conferences of one sort or another, including 17 Saturdays or Sundays. Aside from our own annual meeting and those of the American Medical Association in Chicago and St. Louis, he was present at six meetings out of Chicago ranging from one to three days in length.

Separate news releases distributed totalled 31, fewer than the 40 of the preceding year, but total pieces mailed rose to 9,850, compared to 9,250. Clippings received as a result of these mailings nearly doubled, but an accurate count is impractical.

The increase, however, indicates the widespread and growing interest in the type of news release issued by the Society's public relations service and justifies the careful selection exercised to avoid wasting the time and energy of newspaper and radio editors by sending only what they, as experienced newsmen, would themselves choose as newsworthy. By maintaining such principles, it is believed that our news releases enjoy at least as high a rating as any other first-class news material among the many hundreds of pieces which pile up on every editor's desk each week.

The avid acceptance of news having to do with socialized medicine also bespeaks the deep interest in the costs and quality of medical care on the part of the general public.

Respectfully submitted, JAMES H. HUTTON, M.D., *Chairman*, EVERETT P. COLEMAN, M.D., EDWIN S. HAMILTON, M.D., *Committee on Medical Service and Public Relations*.

DR. HUTTON: This is a supplemental legislative report.

As this report is written, the 81st Congress has before it more measures relating to medicine, science and health than any prior Congress has had at a comparable time. These range in scope all the way from proposals for limited studies of certain diseases, to the highly controversial subject of national compulsory health insurance. Besides the administration's national health program, so called, there are the less revolutionary suggestions offered by Senator Taft and by Senator

Lister Hill. Many of the pending measures are admittedly sound and workable, and confine themselves to areas of the health field in which it can properly be said that the Federal Government has a legitimate role. Among these are an extension of the Hospital Survey and Construction Act, tightening of the Pure Food, Drug and Cosmetic Act and the establishment of a National Science Foundation.

The Illinois General Assembly also has before it numerous good and bad bills pertaining to medicine and health. In the former category is a bill to replace the Hospital Authority Act, which would permit townships to join together to establish hospital facilities in areas of need. A similar bill was enacted by the 65th General Assembly, but was held unconstitutional on technical grounds. Three pending bills would enable the State of Illinois to make a much needed contribution to the fight against tuberculosis. Still other bills propose the compulsory pasteurization of all milk, further state-aid in the construction and expansion of general hospitals, and the elimination of cheap and harmful advertising in the field of optometry. Additional funds are to be provided to the Medical Center Commission, and a \$6,000,000 State Cancer Hospital seems destined for early approval.

There has been no proposal for compulsory health insurance at the state level, and it would seem quite unlikely that any will be made at this session. The bills which the Society is opposing, Chiropractic and Naturopathy, are now at an alarming and critical stage. The chiropractic has been passed by the House, and must be defeated in the Senate if at all. The Naturopathy bills have not yet passed in either house, but are at the passage stage in both.

For several months, this committee and the Committee on Voluntary Prepayment Plans have been meeting and working with representatives of organized labor, A. F. of L., in an effort to reach agreement on revision of the Medical Service Plans Act to permit the establishment of consumer sponsored voluntary health insurance plans. The work which has been done thus far has been subject to the express understanding that it is subject to the approval or disapproval of this House of Delegates; and it has likewise been made clear that in the discussions we have spoken only for the medical profession, and not for hospitals, dentists, nurses or related groups.

On this subject, three bills are now pending in the Illinois House of Representatives, and the Committee requests the direction of the House of Delegates in regard to them. Two of the bills would amend the Medical Service Plans Act and the Hospital Service Plans Act, respectively, in such a way as to permit the establishment of voluntary health plans under the third bill, which is called "The Voluntary Health Services Plans Act." This bill, briefly, would authorize the creation and operation of consumer sponsored voluntary health services plans, which could include, in addition to medical services, coverage for hospital, dental, nursing and related health services. It contains no provision with respect to the participation of a majority of the resident practicing physicians, and physician representa-

tion on the governing boards would not be controlling. Specifically, the bill provides that thirty per cent of the board shall be doctors of medicine, and that all professional and scientific activities shall be under a Medical Director who shall be a doctor of medicine.

On the basis of a great deal of thought and study, the Committee recommends that the House approve these bills. The committee is under no illusion that they represent a perfect solution of the problem, but does believe that they are a step in the right direction, since the growth of any form of private voluntary health insurance, whether under professional or lay auspices, will help strengthen our defenses against national compulsory health insurance.

REPORT OF THE MEDICO-LEGAL COMMITTEE

There has been a gradual decrease in calls upon our committee during the past year. Most of these requests for assistance have come from men who unfortunately did not have medico-legal protection.

There have been the usual number of cases in which suit has been threatened unless bills for service be reduced or remitted. These cases are usually promoted and stimulated by the connivance of an attorney, and should be resisted in every possible manner since for the most part they constitute a method of blackmail.

Our attention should be directed towards the fact that in issuing statements relative to an individual's competency, the law requires that the patient be examined within five days from the date of issuing his opinion, one member having been brought into Court because of failure to do so.

There has been discussion of an effort to secure for educational and statistical purposes, a report of all cases of malpractice filed in our courts in the State. We recognize the difficulty in securing this information but it has been thought that it might prove valuable.

Again we would urge that no one in the practice of medicine be without adequate medico-legal protection.

Respectfully submitted, OSCAR HAWKINSON, M.D., Chairman, A. L. NICKERSON, M.D., P. R. BLODGETT, M.D., F. E. BIHSS, M.D., DARWIN B. POND, M.D., RALPH McREYNOLDS, M.D., Medico-Legal Committee.

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

THE GENERAL HOSPITAL SITUATION. In the August 14, 1948, issue of the *Journal of The American Medical Association* an excellent review is given of hospital service in the United States. The following summary of hospital data is given:

SUMMARY OF HOSPITAL DATA—1947

ALL REGISTERED HOSPITALS

Number	6,276
Bed capacity	1,425,222
Bassinets	86,378
Patients admitted	15,829,514
Births	2,837,139
Average daily census	1,217,229
Patient days	444,288,585

GENERAL HOSPITALS

Number	4,539
Bed capacity	592,453
Bassinets	82,303
Patients admitted	14,665,195
Births	2,756,959
Average daily census	456,761
Patient days	166,717,765.

The growth of hospitals from 1909 to 1947 is summarized in the table on page 40.

The following quotation from *The Journal of The American Medical Association* is of interest:

"Government hospitals declined in number from 1,962 to 1,917. This decrease occurred principally in the federally controlled group, which numbered 464 hospitals in the previous report and 401 in 1947; the city-county category also showed a decline, from 64 to 58. Total nonprofit hospitals increased by 24 during the reporting period and proprietary hospitals by 17, raising the total of nongovernmental units to 4,359, a gain of less than 1 per cent.

"Little variation from last year's figures is observed in comparing the data based on type of service rendered. Neuropsychiatric hospitals increased from 575 to 585, while tuberculosis sanitariums decreased by about the same number, from 450 in 1946 to 441 in 1947. General hospitals showed a gain of 18 over the previous report, perhaps fewer than would be anticipated. When the decrease in the number of federal hospitals is considered, however, this apparent slight increase appears more significant. General hospitals account for 70 per cent of all hospitals registered, neuropsychiatric for slightly over 9 per cent, tuberculosis sanatoriums for 7 per cent, and the remaining number is made up of several categories including maternal, industrial, eye, ear, nose and throat, children's, orthopedic, isolation, convalescent and rest, institutions, and an inclusive classification, 'all other hospitals.' The official list classifies those registered as hospitals and sanatoriums, and related institutions."

The total bed capacity of the hospitals in the country declined from 1,468,714 in 1946 to 1,425,222 in 1947, whereas the number of patients admitted increased from 15,153,472 in 1946, to 15,829,472 in 1947. The following comment from the article in *The Journal of The American Medical Association* is of interest:

"From the high point of 1,738,944 beds reported in 1945, the bed capacity in registered hospitals has declined to its present level of 1,425,222 beds, representing a further decline of 52,529 beds in the governmental group, primarily federal hospitals, and an increase of 9,037 in the non-governmental category. This compares with a loss of 273,984 beds in governmental hospitals, reported last year and a gain in nongovernmental hospitals of 3,754 beds for the same period. With federal hospitals as a whole reporting the decrease noted, the bed capacities of hospitals under Veterans Administration control gained slightly, with 102,235 beds reported as of July 13, 1948. City hospitals showed an increase of

	<i>Federal Hospitals</i>		<i>State Hospitals</i>		<i>All Other Hospitals</i>		<i>Total</i>	
	<i>No.</i>	<i>Cap.</i>	<i>No.</i>	<i>Cap.</i>	<i>No.</i>	<i>Cap.</i>	<i>No.</i>	<i>Cap.</i>
1909	71	8,827	232	189,049	4,056	223,189	4,359	421,065
1914	93	12,602	294	232,834	4,650	287,045	5,037	532,481
1918	110	18,815	303	262,254	4,910	331,182	5,323	612,251
1923	220	53,869	601	302,208	6,009	399,645	6,830	755,722
1928	294	61,765	595	369,759	5,963	461,410	6,852	892,934
1931	291	69,170	576	419,282	5,746	485,663	6,613	974,115
1932	301	74,151	568	442,601	5,693	497,602	6,562	1,014,354
1933	295	75,635	557	459,646	5,585	491,765	6,437	1,027,046
1934	313	77,865	544	473,035	5,477	497,201	6,334	1,048,101
1935	316	83,353	526	483,994	5,404	507,792	6,246	1,075,139
1936	323	84,234	524	503,306	5,342	509,181	6,189	1,096,721
1937	329	97,951	522	508,913	5,277	517,684	6,128	1,124,548
1938	330	92,248	523	541,279	5,313	527,853	6,166	1,161,380
1939	329	96,338	523	560,575	5,374	538,113	6,226	1,195,026
1940	336	108,928	521	572,079	5,434	545,238	6,291	1,226,245
1941	428	179,202	530	600,320	5,400	544,859	6,358	1,324,381
1942	474	220,938	530	606,437	5,341	556,452	6,345	1,383,827
1943	827	476,673	531	610,115	5,297	562,466	6,655	1,649,254
1944	798	551,135	539	609,025	5,274	569,785	6,611	1,729,945
1945	705	546,384	549	619,642	5,527	572,918	6,511	1,738,944
1946	464	264,486	557	628,363	5,259	575,865	6,280	1,468,714
1947	401	213,204	563	626,648	5,312	585,370	6,276	1,425,222

The number of hospitals has been grouped according to size as follows :

<i>Bed Capacity</i>	<i>General Hospitals</i>		<i>Nervous and Mental</i>		<i>Tuber- culosis</i>	<i>Other Hospitals</i>	<i>Total</i>
Below 25	988		30		25	142	1,185
26- 50	1,083		85		78	205	1,451
51-100	977		71		125	182	1,355
101-200	788		46		94	110	1,038
201-300	322		31		47	44	444
Over 300	381		322		72	28	803
Totals	4,539		585		441	711	6,276

The hospitals were classified according to control as follows :

	<i>Hospitals</i>	<i>Beds</i>	<i>Average Census</i>	<i>Bassinets</i>	<i>Births</i>	<i>Admissions</i>
<i>Governmental</i>						
Federal	401	213,204	168,133	2,444	46,081	1,285,126
State	563	626,648	585,747	1,932	51,700	737,402
County	526	101,402	82,568	4,352	119,620	784,499
City	369	78,184	60,498	5,968	191,576	1,208,546
City-County	58	10,767	7,657	1,028	32,605	188,771
Total Governmental	1,917	1,030,205	904,603	15,724	441,582	4,204,344
<i>Nongovernmental</i>						
Church	1,051	141,920	118,780	27,145	969,653	4,524,859
Nonprofit Assns.	1,965	202,661	158,835	34,110	1,153,863	5,652,649
Individual & Partnership	984	28,325	18,303	6,137	166,363	848,082
Total Nonprofit	3,016	344,581	277,615	61,255	2,123,516	10,177,508
Corporations (profit un- restricted)	359	22,111	16,708	3,262	105,678	599,580
Total proprietary	1,343	50,436	35,011	9,399	272,041	1,447,662
Total Nongovernmental	4,359	395,017	312,626	70,654	2,395,557	11,625,170
Total all hospitals	6,276	1,425,222	1,217,229	86,378	2,837,139	15,829,514

1,650 beds; state, county and city-county institutions, on the other hand, indicated small decreases in their capacities. On the basis of currently available statistics, governmental hospitals now control 72.3 per cent of all hospital beds and the nongovernmental group 27.7 per cent; this compares with 73.7 and 26.3 in 1946 and 78 per cent and 22 per cent in 1945. It should be noted that 626,648 of the 1,030,205 beds under governmental control are located in state hospitals, largely of special types.

"The bed capacity of general hospitals continued to decline, with 641,331 beds reported in 1946 and 592,453 the past year. This decrease, however, should be interpreted in the light of the increase of beds in the nongovernmental group; these latter rose from a figure of 324,211 for 1946 to 334,569 in 1947. General hospitals now represent 41.6 per cent of all beds, neuropsychiatric hospitals 47.9 per cent, tuberculosis sanatoriums 5.8 per cent and other institutions 4.7 per cent. There was an appreciable gain in the number of neuropsychiatric beds during the period, from 674,930 to 680,913; this amounts to only about one-third the gain shown in these hospitals during the 1945-1946 period, however.

"The trend toward increased use of hospital facilities is seen in the greater number of admissions to registered hospitals reported for 1947. Notwithstanding an appreciable drop in the bed capacity, 4.4 per cent more patients were admitted than during the 1946 period. If nongovernmental hospitals alone are considered, the increase is over 10 per cent. Excluding the federal hospitals, all other groups showed an increase in their rate. Admissions to nonprofit organization hospitals rose from 9,198,159 to 10,177,508, an increase of 979,349 patients; this category now accounts for 64.3 per cent of the total number of admissions. The federal hospitals reported a decrease of 664,585 in their admissions; neuropsychiatric hospitals and tuberculosis sanatoriums in the federal group, however, indicated 3 per cent and 22 per cent increases. Governmental hospitals, with 72.3 per cent of bed capacity, had 4,204,344 admissions, or 26.5 per cent of the total; the nongovernmental hospitals, with 27.7 per cent of the beds, had 11,625,170 admissions, or 73.5 per cent. The corresponding percentages in 1946 were 33 and 67. These statistics should be considered on the basis of the type of service involved. For example, federal hospitals of the general type, with 9.2 per cent of the total number of beds, admitted 7.4 per cent of the total number of patients, a more equitable proportion. When the type of service offered is considered, increases were noted in practically all categories. General hospitals increased the number of patients admitted from 14,051,508 to 14,665,195, a gain of 613,687 patients. Appreciable decreases were noted only in admissions to the group classified as institutional, from 144,664 in 1946 to 140,276 in 1947; a part of this decrease may be accounted for by change of classification of the reporting unit. Admissions to tuberculosis sanatoriums remained about constant, with 99,741 ad-

missions for the previous period and 99,080 for this year.

"Of every 1,000 patients entering hospitals during the current reporting period, 926 were admitted to general hospitals, 18 entered neuropsychiatric institutions, 14 were admitted to related institutions including convalescent homes, 10 to isolation units, 7 to eye, ear, nose and throat, 6 to tuberculosis sanatoriums, 6 to maternity hospitals, 6 to children's, 4 to industrial and 3 to orthopedic hospitals."

The average daily census declined from 1,239,454 in 1946 to 1,217,229 in 1947. The percentage of beds occupied increased from 84.4 in 1946 to 85.4 in 1947, and the average length of stay declined from 12.9 days in 1946 to 11.4 days in 1947.

The addition of new beds was not carried out on an extensive scale because of the cost of construction. Estimates on the cost of construction of high grade private hospitals in the Chicago area continue to be about \$20,000 per bed. At this rate an addition of only 50 beds would cost approximately \$1,000,000 and the construction of a new 500 bed hospital would cost approximately \$10,000,000. In the last few months the cost of labor and materials has diminished slightly but it is hoped that they will decline still further so that many hospitals in the country may proceed with badly needed additions.

THE COST OF HOSPITALIZATION. Hospital costs continued to rise some during 1948. The cost per patient per day advanced in different parts of the country. In Chicago in most hospitals it was between \$17 and \$18 per day at the end of the year. In some other cities it was a little higher. Hospital costs have risen so high that it is very difficult for patients of moderate means to afford them. It has been necessary for various plans of hospital care to raise their premiums in order to meet rising costs.

In spite of the high cost of hospitalization the type of service offered showed only slight improvement. Hospitals continue to employ a rather low grade of personnel on a relatively low salary basis and this personnel continued to render the type of service which would be expected of them.

THE QUALITY OF HOSPITAL CARE. The quality of hospital care improved a little during 1948, largely because of some easing of the nursing shortage. There was also a slight improvement in the quality of non-professional personnel although individuals in this category continued to be of mediocre calibre. Hospitals might give serious thought to the employment of fewer personnel of higher calibre on the theory that one very competent employee is capable of much more work than a mediocre employee. The bed situation eased a little toward the end of the year, probably because of a slight slump in business as a whole. However, most hospitals continued to operate on the assumption that they were doing people a favor by agreeing to admit them to a hospital. The admitting personnel in hospitals, in particular, have not been very friendly to patients.

Many hospitals neglect some of the important details of good service, such as adequate telephone accommodations. Some hospital administrators feel that adequate provision for telephone service should not be made for

people in private rooms, on the assumption that the patient should not be bothered with telephone calls. This is a very short-sighted policy and is rather typical of the attitude of many hospital administrators.

The food in hospitals continued to be about as bad as ever, although the Committee realizes that the cost of food is so high that it would be difficult for hospitals to serve the best food available.

It would be well for hospital administrators to think more and more in terms of public welfare and to do everything they can to improve the quality of their service to the public.

THE ROLE OF THE HOSPITAL IN MEDICAL EDUCATION. Hospitals have a very important role to play in keeping the members of their staffs constantly up to date. Most of them hold weekly seminars which are devoted to clinical pathological conferences, or to reports of progress in various fields of medicine. Many hospitals, in addition, have regular meetings of various departments of their staffs. Hospitals still have a great opportunity to improve the quality of training for internes and residents. Many medical schools might expand their service to the community by developing a cooperative arrangement with neighboring hospitals for graduate training. This is particularly true of the state medical schools, some of which have already completed arrangements with various hospitals around the state for the training of residents. There is still a great shortage of internes but good residencies continue to be in demand. Hospitals should make every effort to improve the quality of their resident training in order to develop the highest type of practicing physician and to improve the quality of their service to the public. Cooperative arrangements can easily be worked out between hospitals and medical schools without any serious loss of control on the part of the hospital.

THE GENERAL PRACTITIONER. The status of the general practitioner continued to improve a little during 1948. Several more hospitals established departments of general practice. The Section on General Practice of the American Medical Association and the Academy of General Practice were very active and developed excellent programs for their annual meetings. The Academy of General Practice has set up rules and regulations concerning admission to membership. One very important requirement is that members must present evidence of attendance at 150 hours of postgraduate training every three years. Various medical schools have already set up programs for the training of men for general practice.

Consideration is still being given to the establishment of a specialty board for general practitioners although there is still great opposition to this in many quarters. It is hoped that the specialty boards will decide to allow credit for time spent in general practice to men who wish later to enter a special field of medicine.

A little bitterness has developed on the part of the general practitioner toward the specialist. It is to be hoped that with the development of a comprehensive program for the general practitioner this bitterness will disappear. All physicians must work together for the

common good regardless of what field of medicine they enter.

GROUP PRACTICE. The development of clinics all over the country has proceeded rapidly. Men interested in various fields of medicine have formed groups in order to develop better laboratory facilities and better hospital facilities for the care of patients. In many rural areas the development of clinics with adequate hospital affiliations is an ideal method of serving a large surrounding area. The attitude of the profession toward group practice has fortunately undergone some modification. Until the constitution of the Chicago Medical Society was changed about one year ago Medical Policy 7 read as follows:

"7. The words Clinic, Institute, Academy, Cardiac Therapy, Gastro Intestinal Therapy, and the like, are misleading when applied to groups or organizations of physicians engaged in any or all branches of the practice of medicine."

The word "clinic" was eliminated from this policy but the fact that it remained in the constitution so long shows that physicians for a long period of time looked with skepticism on group practice.

A clinic with adequate laboratory and hospital affiliations, and with adequate provision for postgraduate medical education, represents a very satisfactory medium for the practice of medicine. It conserves the time of patients and the better clinics of the country render a high quality of medical care. There are, of course, many ways of rendering high grade medical service and no one method should be developed to the exclusion of others.

THE NURSING PROBLEM. The nursing problem remained acute during 1948 although it did improve some. Nursing schools continued to have difficulty in attracting desirable students to their classes although some of the better schools continued to fill their quotas without difficulty.

The availability of nurses has varied a great deal from hospital to hospital. Some have had no shortage at all. It would appear that those nursing schools and hospitals that have had no shortage of student nurses and graduate nurses have made the nursing profession more attractive to women than the hospitals that have had shortages. This has been done by a better educational program, better living conditions, better working conditions and better pay.

There are many reasons for the nursing shortage but the most important one still appears to be economic. Nurses are not paid an adequate wage in the light of the training which they have, and adequate provisions have not been made for the advancement of nurses who remain with institutions over a long period of time. Very little attention has been given to satisfactory retirement policies for nurses who have remained in the profession over a period of many years. The American Nursing Association has gone on record as being in favor of collective bargaining. The medical profession has not looked with favor on this attitude and it is hoped that the nursing profession can be improved without resorting to this practice.

HEALTH INSURANCE. It is the duty of the medical profession to provide ways and means for rendering adequate medical service to all people regardless of their financial status. Certain groups in the country have taken the stand that the distribution of medical care cannot be solved satisfactorily without the development of a system of compulsory health insurance by the Federal Government. This would be provided by a payroll deduction shared equally by the employer and the employee and by taxation on the income of everyone who pays an income tax.

There are three major objections to compulsory health insurance, or political medicine: (1) it would greatly increase the cost of medical care; (2) it would greatly lower the quality of medical care by virtue of the complicated set up required to administer it; (3) it would be the first step in the development of a completely socialistic state.

The American Medical Association has employed the public relations firm of Whitaker & Baxter to carry on an educational program. There are two phases of this program: (1) to acquaint the public with the dangers of compulsory health insurance, and (2) to urge everyone to subscribe to voluntary health insurance plan and to make these plans available to as many people as possible. There appears to be a demand and a need for health insurance. The only question is whether we will have it on a compulsory or a voluntary basis.

A voluntary system of health insurance would provide people with hospitalization and medical care at a lower cost and in a much more efficient manner than compulsory health insurance, and would result in the preservation of free enterprise. Blue Cross has developed very rapidly and now has about 33,000,000 subscribers. Its benefits have been liberalized and it has made hospitalization available to many people who previously could not have afforded this type of care.

Various medical societies throughout the country have recently developed plans for the pre-payment of medical care. These plans have formed an association known as Blue Shield, and the Blue Shield Plans of the country are administered by Blue Cross on a non-profit basis with Boards of Directors consisting largely of members of the medical profession. Both Blue Cross and Blue Shield are operated on a non-profit basis and the cost of operation of Blue Cross is about 12 per cent so that 88 per cent of each premium dollar is returned to the subscriber. There appears to be little doubt that as Blue Shield plans are developed they will run at as low a cost as Blue Cross. Blue Shield, although a recent development, already has over 3,000,000 subscribers in the country. The Chicago plan which began only July 1, 1948, will have over 100,000 subscribers by July 1, 1949. Other plans are developing just as rapidly. There are already over 50,000,000 people enrolled in all types of voluntary health insurance plans in the country.

Blue Cross and Blue Shield would like to establish a national health insurance company so that organizations which employ labor all over the country may be able to enroll through one agency. There would be no objection to this arrangement provided adequate provi-

sion is made for local variations in cost, and provided a monopoly on health insurance does not result. It is very important for the commercial insurance companies to enter actively the field of health insurance so that the public will be provided with hospitalization and medical care by free competition in an open market. This is the whole spirit of private enterprise and it is only in this way that the development of a monopoly can be avoided and the public be given the highest quality of medical service.

Some further provision must be made for medical care for people who are unemployed, people on relief and old people who are unable to work. The problem in these groups is primarily an economic one but nevertheless some arrangement must be worked out so that they will be adequately covered. It would be desirable to handle this problem on a state and county level rather than have it handled by the federal government.

POSTGRADUATE MEDICAL EDUCATION. More and more attention has been given in recent years to the continuing education of physicians. Adequate facilities need to be provided so that physicians can keep constantly up to date. Developments in medicine are occurring so rapidly that any physician who wishes to give his patients the benefit of the intensive research that is being carried on in all fields of medicine must remain a student of medicine. In a large metropolitan area like Chicago there are unusual opportunities for physicians to keep themselves well informed. In fact, many excellent scientific meetings are rather poorly attended.

The problem is a little different downstate although definite opportunities are provided for the education of physicians. The postgraduate opportunities available to physicians in the State of Illinois may be summarized as follows:

1. Postgraduate days arranged by the Illinois State Medical Society in various parts of the state.
2. Scientific programs of county medical societies.
3. The annual meeting of the Illinois State Medical Society which is designed primarily for the general practitioner.
4. The annual clinical conference of the Chicago Medical Society which is also designed for the general practitioner.
5. Intensive postgraduate courses arranged by the Chicago Medical Society and by various medical schools.
6. Numerous scientific meetings of various special societies in the city of Chicago.
7. The annual meeting of the Mississippi Valley Medical Society, the program of which is arranged primarily for the general practitioners of Illinois, Iowa, and Missouri.

Chicago, by virtue of its central location, is the meeting place for a great many national societies, most of which are open to all physicians.

Some medical schools have arranged special courses for practicing physicians which are scheduled one or two hours a week over a period of several months. Such a course is now being given by the University of Illinois. The postgraduate courses started by the Chi-

Chicago Medical Society in the fall of 1947 have proved to be very popular and physicians have come to them from all over the country, although about half of those registered have come from the State of Illinois.

The postgraduate days arranged by the Illinois State Medical Society are of very definite value and they bring postgraduate medical education directly to practicing physicians in various rural areas. These programs might well be increased in number, care being taken to hold the meetings in areas which are strategically located so that they will be available to physicians in many surrounding counties.

THE MEDICAL SCHOOL PROBLEM. Since our report for 1948 was made to the House of Delegates the number of approved medical schools in Chicago has been increased from 4 to 5. The Chicago Medical School was approved November 9, 1948.

The approval of this school represents a very definite forward step in medical education in Chicago. It will now be much easier for the Chicago Medical School to raise money and to secure more desirable hospital affiliations. The Chicago Medical School is the only school in Chicago that is not affiliated with a university.

All of the schools have developed rapidly but all of them have their own problems and their own needs. The University of Illinois, for example, is very much in need of a large private pavilion to take care of the private patients of its large part-time clinical staff. It has excellent facilities for the care of charity patients, but the practicing physicians on its staff must now take their private patients to various hospitals in different parts of the city. A private hospital on the University campus would provide geographic full time for a large number of the clinical staff.

All the medical schools have plans for the development of additional hospital facilities. The University of Chicago is now building a new cancer hospital. A large veterans hospital and a new Mercy Hospital are to be built close to the campus of Northwestern University. The University of Illinois has plans for the immediate expansion of the bed capacity of the Research and Educational Hospital. Plans have also been made to develop a tuberculosis institute and a hospital for the study of problems of geriatrics. Loyola has plans for erecting a new medical school. The West Side Medical Center is slowly being improved and work is proceeding on the Congress Street express highway which is a very important phase of the west side development.

There was one very unfortunate occurrence at the University of Illinois College of Medicine. A sub-committee of the investigating committee of the House of Representatives of the Illinois State Legislature recently carried on an investigation in Chicago to determine whether or not the Medical School of the State University should be investigated. This investigation was aimed particularly at the Dean, Dr. John B. Youmans. The immediate cause of the investigation was the method of dealing with certain non-academic personnel who were on civil service. The investigation was carried out in a rather arbitrary manner and the Dean was criticised for doing certain things which actually brought credit to the school. For example, he was accused of

spending some of his time to edit a medical journal, and of being reimbursed for trips to Europe on behalf of the Government to study nutritional problems in Germany. Medical schools are always happy to have men of sufficiently high calibre to be invited to do things like these. The hearings of this sub-committee were open to the public and were designed to discredit the Dean.

The State Legislature has the right to investigate its own state university at any time it sees fit. However, it is desirable to carry out these investigations in a friendly manner, and to approach all problems with an open mind. It is very important to keep politics out of the state university if it is to continue to develop rapidly as a great national and international institution. The Medical School of the University of Illinois has made very rapid forward strides and has a very bright future. It is sincerely hoped that investigations like the one which has just been carried on will not be repeated. The Medical School, like other departments of the University of Illinois, is always ready and willing to cooperate with the State Legislature in every way possible to improve the quality of medical training, and the character of medical service rendered to the people of Illinois.

Respectfully submitted, W. O. THOMPSON, M.D.,
Chairman, A. C. IVY, M.D., H. O. MUNSON, M.D.,
Committee on Medical Education and Hospitals.

DR. THOMPSON: It was requested that I make an additional report concerning Blue Cross and Blue Shield. You will notice a reference to public health insurance on page 39 of the Handbook. Blue Cross has gone ahead with plans to establish a national enrollment agency so that national organizations will be able to supply their employees with hospital insurance through one company. It was pointed out in the report that the plan to amalgamate Blue Cross and Blue Shield on a national basis had met with opposition. The plan is now to form a national enrollment agency for Blue Shield run by physicians and a separate agency for Blue Cross run by the hospitals. The Committee would like to point out that they believe this is a desirable step. However, they should like to point out the great importance of encouraging not only Blue Cross and Blue Shield but also commercial insurance companies, to enter actively the field of health insurance. A resolution was passed by the Council of the Chicago Medical Society recently "that the Chicago Medical Society reaffirm its belief that the best solution for the problem of increasing the availability of medical care is to be found through continuing experimentation with voluntary and competitive prepayment plans, sponsored by non-profit as well as by commercial insurance companies, consistent with the highest standards of medical practice." We have to be extremely careful at the present time not to do anything that would put us in an embarrassing position. I think it is not only possible but probable that if one national insurance company were formed and if our support were given entirely to Blue Cross and Blue Shield, the time would not be far distant when certain abuses would creep in and when this company would try to control the practice of medicine throughout the coun-

try and they would be accused of violating the Sherman Anti-Trust laws. It is important that we look at the problem as a whole. The whole spirit of free enterprise is free competition in an open market. The field of health insurance should be entered actively not only by Blue Cross and Blue Shield but also by most of the better commercial insurance companies.

The only other point I should like to make here concerns the medical schools. The Chicago Medical School has been approved. This is a very fortunate and very desirable step. The approval of this school raises a problem regarding old graduates. There are graduates throughout the state who graduated before the school was approved. They find themselves in the embarrassing position of being graduates of a school now approved but not approved when they graduated. The American Medical Association has been rather lenient about overlooking the fact that certain graduates of this school have been members of certain hospital staffs. The American College of Surgeons still looks very carefully at staff lists to make sure that there are not very many graduates of the Chicago Medical School on the list. We should do everything we can now that this school has been approved to make it possible for graduates of the school in former years to carry on the practice of medicine. This is desirable not only from the point of view of public relations but also from the point of view of fair play. The Chicago Medical School for a long time has done a pretty good job and there are many graduates of this school who are excellent physicians. I think it is very important that all of us in our communities should do everything we can to make it possible for these men to carry on the practice of medicine with adequate hospital affiliation.

REPORT OF THE COMMITTEE ON MEDICAL BENEVOLENCE

The load carried by the benevolence fund is practically the same as that of a year ago. A number of beneficiaries have passed away and during this interval about an equal number have been added. Those added like those who have passed away are in the late seventies and eighties, the number on our list now being 21.

The effort to procure a reserve fund by means of popular subscription received such poor support from our members that the House of Delegates in 1947 wisely decided to add \$5.00 to our annual dues for the purpose of maintaining this fund. This attempt to enlist the interest of the membership was disappointing, but we feel that the present method will provide for all of our needs.

During the past few months, several requests have come from those who are not and never have been members of their local Society. This is unfortunate and only emphasizes the fact that some of us sometimes do not realize the value of our membership.

In accordance with our constitution and by-laws, our reserve fund is being invested in safe securities, the proceeds of which we hope will some day care for all of our needs.

OSCAR HAWKINSON, M.D., *Chairman*, LEE O. FRECH, M.D., HAROLD M. CAMP, M.D., *Secretary*, *Committee on Medical Benevolence*.

REPORT OF THE COMMITTEE ON MEDICAL TESTIMONY

When this committee was appointed and its duties outlined, it was the sincere wish and hope that the calls for its service would be few and far between. There have been some disappointments during the past year. We have had a number of complaints of several different types, the most numerous having to do with personal injury. In these cases, particularly where fractures are concerned, there is sometimes a vast difference of opinion as to the extent of the injury. Complaints have come from attorneys and from the judiciary.

In one instance, the witness admitted a mistake in the diagnosis. In another instance, the judge in the case was quite bitter about the doctor's failure to keep adequate records of the injury, the number of calls, dates, and types of service rendered in a case which seemed to be largely on a neurotic basis.

Meetings have been held with members of the Chicago Bar Association for the purpose of coordinating our efforts. There was discussion of connivance of not too scrupulous lawyers in preparing of medical testimony and it was hoped that steps could be taken to correct this situation. Suggestions have also been made that when writing statements for patients relative to injury or illness nothing be put in writing that can not be substantiated in court. Browbeating of physicians when testifying in court came into review and was concluded that this matter comes within the jurisdiction of the judge who has full and complete responsibility. Subpoena to appear before a lawyer for pre-trial testimony should be carefully examined before responding to its demands.

We have been keeping all of the judiciary and hearing bodies informed of the work of the committee and it is the hope as time goes by this work may be greatly decreased.

Respectfully submitted, OSCAR HAWKINSON, M.D., *Chairman*. WARREN W. FUREY, M.D., HARRY A. OBERHELMAN, M.D., EVERETT P. COLEMAN, M.D., ARTHUR F. GOODYEAR, M.D., E. H. WELD, M.D., WALTER L. PALMER, M.D., W. J. GILLESBY, M.D., *Committee on Medical Testimony*.

REPORT OF THE COMMITTEE ON ARCHIVES

The activities of the Committee on Archives during the year have been centered upon the collection of information for the purpose of compiling a second volume of the history of the Illinois State Medical Society and for the purpose of having on hand information for such forthcoming volumes as the Society may desire to publish.

The enlargement of the Committee on Archives and the collaboration of this committee with other committees is of distinct benefit to the Society.

Meetings have been attended at Springfield, Chicago and at Monmouth.

There is still in process procurement of data from physicians who are living.

The Woman's Auxiliary is assuming responsibility

for information relative to those of our number who have died.

The Committee thanks the Council for its sympathetic cooperation throughout the year.

Respectfully submitted, D. D. MONROE, M.D.,
Chairman. E. H. WELD, M.D., J. J. MOORE, M.D.,
Committee on Archives.

REPORTS OF COUNCIL COMMITTEES

REPORT OF THE EDUCATIONAL COMMITTEE

The following report is submitted for activities of the Educational Committee during the year ended April 1, 1949.

During the year the Committee met three times: May 11, June 21 and October 4, all in 1948.

TELEVISION. The most inspiring health education effort launched by the Committee this year was a series of television programs. On October 2, through the courtesy of the Bureau of Health Education of the American Medical Association, and in cooperation with the National Society for Medical Research, a telecast on Animal Experimentation was used on WBKB with Dr. A. C. Ivy, two blue babies, and Caesar, the dog hero of the original Potts-Smith "blue-baby" operation.

On December 16, a new affiliation was made with WGN-TV by the Secretary of the Committee. This affiliation was implemented by Dr. Theodore R. Van Dellen, Medical Editor of the Chicago Tribune, and it is the wish of this Committee to acknowledge its gratitude to Dr. Van Dellen for his splendid cooperation in not only assisting in negotiating the telecasts but for his personal participation each week as physician-moderator. Every program featured physicians, patients, charts, equipment and other media to tell a story. The series scheduled at the time this report was prepared are:

- December 16—Henry T. Ricketts, M.D., and Chester Coggeshall, M.D., Diabetes Under Control.
January 6—Harry M. Hedge, M.D., Birthmarks.
January 13—Philip Lewin, M.D., What's Back of Your Backache?
January 27—Stanley Fahlstrom, M.D., and Charles Dunham, M.D., Is Your Pain Arthritis?
February 3—Chauncey C. Maher, M.D., Your Heart.
February 10—John L. Reichert, M.D., Your Growing Child.
February 17—Eugene Hamilton, M.D., Splint 'Em Where They Lie.
February 24—G. Henry Mundt, Jr., M.D., Your Child's Eyes.
March 3—Edwin R. Levine, M.D., Prevent Tuberculosis.
March 10—John T. Reynolds, M.D., What Is Appendicitis?
March 17—Fremont A. Chandler, M.D., Poliomyelitis.
March 24—Edward A. Piszczek, M.D., Self Medication is Dangerous.
March 29—Herbert E. Schmitz, M.D., Maybe It Isn't Cancer.
April 5—Frederick W. Merrifield, M.D., John A. Thompson, D. D. S., Harold Westlake, M. A., What Is Cleft Lip and Cleft Palate?
April 12—John L. Keeley, M.D., Gallbladder Disease.

April 19—David Slight, M.D., Mental Health.

April 26—Robert G. Kesel, D. D. S., Donald Kerr.

D. D. S., Oral Hygiene.

That television is an expressive medium in visual education has been demonstrated successfully in the telecasts held thus far. The programs have been arranged as a public information feature by WGN-TV, in cooperation with the Educational Committee. While scripts were prepared in advance for continuity and cue material, the discussions were casual and conversational. Actual patients of the cooperating physicians gave an authenticity to the programs that was dramatic in its appeal. Their "ad lib" replies to the questions of Dr. Van Dellen and the participating physician assisted in the emotional appeal.

Dr. Van Dellen's inherent personality and his experience, gained through appearances in all shows, provides a skillful professional touch in glossing over any break in continuity by our physicians who are "amateurs" in television. The studio direction, provided by Jay Faraghan, program director of WGN-TV, Cosmo Genovese, producer, George Bauer, announcer, and other members of the staff, was professional and understanding. In every telecast the camera work has been excellent.

It is estimated by WGN-TV that at least 100,000 persons in the Chicago area are viewing these programs each week. Television as a medium in health education has great potentialities and cannot be overlooked as a valuable contribution to public health information. A few sample comments follow:

"I wish to compliment you on the telecast Thursday afternoon on Diabetes. I found it both interesting and instructive. I consider such programs as fine public service."

"I so enjoy your program. The dissertation and demonstration of birthmarks was very instructive. I wonder if you could have one on skin conditions in general. I know that would be very much appreciated by many."

"I enjoyed the afternoon television programs very much on diabetes and birthmarks. Please continue."

"I made special arrangements to be home in time for your TV program, 'What's Back of Your Backache.' I also brought a friend home and we both were glad we made the effort as the program was very interesting. I hope it was the first of a long series. We'll be sure to be on hand for the next one on 'Arthritis.'"

SPEAKERS BUREAU. For the year ended April 1, 1949, 146 speakers had been scheduled as compared with 118 for the corresponding period last year. The total does not include eleven speakers that have been scheduled during May and June, a period beyond that covered by this report. The organizations include: Illinois Federation of Women's Clubs, the Illinois Congress of Parents and Teachers in their local units; Chemistry Club of Bowen High School; Fenger High School, the Y. W. C. A., the Y. M. C. A., Tuley High School, Drummond Elementary School, Skinner Elementary School, Sherwood School, Funston School, Mason Elementary School, Bryant School, Froebel

School, Hale School, Earle School, Mitchell Elementary School, Greene Elementary School, Brainard School, Florence Nightingale School, Steinmetz High School, Howe School, Leukemia Research Foundation, Ryburn King Hospital's Nurses graduation exercises, Kiwanis Clubs, Good Neighbor Society, Rotary Clubs, Woman's Auxiliaries, Chicago Town Hall and Club, Berwyn Woman's Civic Club, B'nai B'rith Youth Organization, Young Mothers' Club of Bryn Mawr, Gage Park Women's Club, American Veterans Committee, Illinois State Veterinary Medical Association, Evanston Catholic Woman's Club, Humboldt Park Civic League, St. Cecelia's Home and School Guild, Brainard Civic Association, Lions Clubs, Chicago Woman's Aid Legislative Committee, Junior Woman's Club of Flanagan, St. Viator's Girl Scouts, Physicians' Fellowship Club Auxiliary, St. John Berchman's Holy Name Society, Rosary College Alumni Association, Chicago Engineers Club, West Suburban Republican Woman's Club, Toman Public Library Forum, South Shore Branch Library; Guild of Tabernacle Church of the Divine Infant, Princeton Hospital Auxiliary, Burnham School of Cosmetic Hygiene, Mothers of Triplets, Associated Clubs and Churches, North Central Medical Association, Federation of Employees' Benefit Association, Church groups.

Three speakers were scheduled which were subsequently cancelled. The opening lecture of the newly organized Fullerton Business and Professional Women's Club was scheduled.

Six speakers were scheduled for the first Career Conference sponsored by the Chicago Technical Societies Council, the Chicago Sun-Times and Illinois Institute of Technology. Two were subsequently cancelled when the enrollment for the conference did not indicate the need for six speakers on Medicine as a Career. A letter from the president of the Chicago Technical Societies Council read:

"From all accounts, the first Chicago Career Conference held at Illinois Institute of Technology, December 28 to 30, was a high success. Your assistance in no small measure contributed markedly thereto. As president of the Chicago Technical Societies Council, I am hereby authorized by the Board of Directors to thank you deeply for your time and efforts."

Seven speakers were scheduled in a series of ten on Adult Health Problems for the Village of Oak Park. From the President of the Village, we received the following:

"The Village of Oak Park is deeply indebted to you, and to the Illinois State Medical Society for the splendid support you have given the Oak Park lecture series on Adult Health Problems. I know that it has taken considerable of your time to secure the splendid array of medical talent for this series of lectures. On behalf of the people of the Village of Oak Park I wish to express our gratitude for this splendid support and help in enabling us to carry out this interesting project."

In addition five films were scheduled: three on "Human Reproduction," at which showing a physician

must be present, and "When Baby Goes to School," available through Mead Johnson and Company. A physician was also scheduled to appear as a judge in the Ideal Farmer's Daughter beauty contest during the National Farm Show.

On February 14, the Committee turned over all package library material and requests for speakers on National Compulsory Sickness Insurance to Mr. James C. Leary. At the time, 47 speakers on the subject had been scheduled.

Persons who cooperated in the Educational Committee Speakers' Bureau were Drs. W. W. Bauer, George Wakerlin, Charles Runner, Philip Rosenblum, Charlotte Babcock, Jules Masserman, W. W. Bolton, Howard M. Sheaff, Morris Braude, Leonard J. Murphy, George A. Hellmuth, Mary G. Schroeder, Charles E. Pope, Harold Miller, Edward A. Piszczek, Matthew M. Steiner, Charles D. Krause, Franklin Fitch, Paul J. Starceovich, Percy E. Hopkins, Walter Tobin, Harlan English, Zelda Teplitz, Margaret M. Kunde, Walter C. Bornemeier, Everett P. Coleman, Robert R. Mustell, David Slight, Dwight Clark, Harold M. Camp, Maurice Cottle, Chester Coggeshall, George Weber, William R. Raycraft, Joseph T. O'Neill, Robert Hagan, Rudla Rind, Harold E. Davis, Howard Lindberg, Harry E. Manz, Norman B. Dobin, Arthur H. Roseblum, Herbert Rattner, Charles J. Smith, Gilbert H. Marquardt, Bertha Shafer, Harold Rosenblum, Harry Leichenger, Edward C. Turner, Rex D. Hammond, Alfred D. Biggs, Carroll Birch, Sydney B. Mannel, Roy Kegerreis, Marvin Lerner, Beulah C. Bosselman, Joseph Bertucci, Henry Fineberg, Warren H. Cole, Ernst Schmidhofer, Charles N. Pease, Leo A. Kaplan, Morris Friedell, Belle Korman, Lowell Coggeshall, Robert B. Berson, Y. T. Oester, Julius E. Ginsberg, Adrian D. M. Krause, Edwin Hirsch, Arthur S. Webb, Harry H. Boyle, Walter Lawrence, Peter T. Gray, Benjamin Kaplan, Minnie Perlstein, Hyman Gordon, W. K. Gottstein, C. Edward Stepan, Julius Richmond, Edmund Hess, Robert E. Lee, Frank G. Murphy, Howard L. Alt. In addition the following laymen cooperated: John Bach, John W. Neal, Lawrence Rember, Ralph Rohweder, Howard Brower, George E. Hall, Ralph P. Creer, Mrs. Madeline Roessler and Daniel J. Connor.

HEALTH TALK. On March 15, the weekly mailing list of Health Talk totaled 894 as compared with 543 for the similar period of 1948. The weekly mailing goes to the press of Illinois, some physicians, health departments, nurses, health educators and house organs.

On March 15, 1949, two selected copies of Health Talk were mailed to 3,970 individuals including health chairmen and others, schools, libraries. For the year ending March 15, 1948, a total of 4,347 made up the monthly mailing list. This would suggest a decrease in the monthly mailing list, but it must be pointed out that during this year an attempt was made to revise the mailing list. Return postage guarantee envelopes were used, which resulted in the removal of 1,000 names of deceased persons, those who had moved and left no forwarding address, institutions out of business and so forth. However, during the process of removing these names from the file, 600 new names were added.

instead of being a decrease of 400, as suggested by these totals, it is an addition of 600, which makes a current active mailing list of 3,970, and does not include the fifty new names waiting to be included in the mailing list of April 15. In addition 10 persons each month receive a total of 527 copies for personal distribution.

An incomplete check on press clipping returns showed that as of March 15, 1949, 222 papers were using Health Talk in its entirety. One editor from Aurora called to ask if his name had been removed from the list—that he thought the material was excellent. For some reason two issues addressed to him had gone astray. Dated March 2, a letter from the editor of the LaSalle County Ledger said: "If available in the form of Health Talk, will you please send us any article or articles you may have on the subject of arthritis. We appreciate the Health Talk service and the readable manner in which they are written for the layman."

The Geneseo Republic, when a local outbreak of poliomyelitis was reported, asked the Educational Committee for a story with a two day deadline. The Health Talk on the subject was sent by return mail and special delivery. In reply, the Geneseo Republic said: "Your letter received Monday afternoon. It fills the bill exactly, for which I am most appreciative. Now let's hope that it helps the people here. Thanks again."

Other comments include:

From a teacher in Macomb, Illinois: "Have had the opportunity to receive Health Talk, released by your office, which proves to be of great assistance to me in my college work. I think it is fine service to the public."

From the division of public health education, Peoria Department of Health: "The comment of these releases is very helpful to me in interpreting good health practices to the public and I do appreciate receiving them."

From an instructor in physical education, University of Illinois School of Physical Education: "Please place me on your mailing list for Health Talk. I can use this material to good advantage in my instruction in the physical education school."

From a professor in the same school: "I am greatly indebted to you for the excellent material in Health Talk. This is called to the attention of my class members and posted on the bulletin board so I believe it does considerable good."

From Health Education Council, New York: "Your Health Talks have been reaching me regularly and I have been reading them with pleasure and interest. Your style has that neat combination of authority and simplicity. I keep these on file for further uses—as in class lectures at Columbia."

From United Specialties Company: "I have missed the last three or four issues of Health Talk and regret it. It is excellent. Please return me to your mailing list."

A nun who was on our mailing list in Chicago wrote from her new post at St. John's Hospital, Huron, S. D.: "Your publication Health Talk is so very interesting and I have valued them for their educational content. Since

we conduct a School of Nursing here, your contribution would be invaluable. May we have Health Talk?"

A health educator in Ann Arbor, Michigan, asked to be placed on the mailing list. Other requests came from a nurse for the Moody Bible Institute; the Home Adviser from Lake County of the College of Agriculture, University of Illinois, asked that her 21 health chairmen for home bureaus be added to our list for Health Talk; a supervising nurse at Hammond Public Schools, a biology instructor at Iowa Wesleyan College and directors of health education in many schools have requested that their names be added to our mailing list.

The Public Relations Department of the American Medical Association asked for a short story on the use of Health Talk to include in its PR Doctor. The material was prepared under the title of "A Chapter in the Illinois Story on Health Education." The reason it has not yet been used in the PR Doctor is that this medium is being devoted to material to combat socialized medicine.

The Royal Neighbor uses Health Talk. This publication of the Royal Neighbors of America goes to 535,000 members.

Jane Stafford, Science Service, Inc., used Health Talk on Airsickness in her syndicate column.

The West Virginia Medical Journal featured the Health Talk on Vacations in its editorial pages, August, 1948, reprinting the story in full with a credit to the Educational Committee.

The Lawrence County Health Department uses it regularly and featured the one on the Public Health Nurse in a special outline of a day's activities.

Some issues meet with a certain demand. The Illinois Society of Mental Hygiene asked for 1,700 copies of "Care of Tiny Tots" and 1,300 on "Mental Health of the Child;" The Associated Women of the American Farm Bureau, 300 of "Undulant Fever;" Cook County Department of Public Health, 1,400 issues of "Can You See;" the Illinois Agricultural Association, 90 each of twenty different issues; Y. W. C. A., 2,000 of "What's Your Poison?"; Chicago Industrial Health Association, complete back file and all future issues; Chicago Teachers College, 30 on "Coronary Thrombosis;" Superintendent of Dixon Public Schools, 250 of "Health Future of Your Child;" Illinois Epilepsy League, 50 of "Epilepsy;" American Epilepsy League, 500 of "Epilepsy;" three PTA chairmen asked for 150 copies of certain issues for distribution at their meetings in March; a summer round-up chairman asked for 80 copies of "The Summer Round-Up" and the Salvation Army Clinic requested 60 copies of "Diabetes." Regularly other requests from health chairmen of the PTA and Federation of Women's Clubs and educators ask for numbers ranging from 50 to 150 copies of different issues.

PACKAGE LIBRARIES. From April 1, 1948 to March 15, 1949, 72 package libraries were mailed, 38 of which were on the subject of Compulsory Health Insurance. Other subjects included: Contact Lenses, Skin and Cosmetics, Pernicious Anemia, Food and Health, Undulant Fever, Understanding the Adolescent, Heart Disease, Menopause, Sewage Disposal, New

Drugs, Poliomyelitis, Children's Diseases, Facing the Forties, Progress in Medicine and Surgery, DDT, The Kidneys, Ulcer, Pneumonia, Leukemia, Cancer, Trichinosis, Malaria Control, Medicine as a Career, Sex Education, Children and Habits, Rheumatic Fever, Tuberculosis, and Anesthesia.

EXHIBIT. "The Doctor and His Medical Society," the exhibit created in 1947, was not used often this year. However, it was on display at the following:

Illinois Congress of Parents and Teachers, Springfield, April 8-10.

Illinois State Medical Society, Chicago, May 10-12.

Illinois Federation of Women's Clubs, Chicago, May 17-19.

American Medical Association, Chicago, June 21-25.

Illinois State Fair, Springfield, August 13-22.

Woman's Club in Lincoln, November 3.

At the State Fair, the Woman's Auxiliary of the Sangamon County Medical Society staffed the exhibit and did a splendid public relations job. An accurate record was not kept of the amount of literature distributed, but it can be estimated that at least 4,500 prepayment pamphlets were given out, 4,000 Doctors and Horses, 2,500 The Doctor and His Medical Society, and 10,000 Health Talks.

LIAISON. The Secretary's time is always at the disposal of any one who needs her assistance. In addition to the groups serviced with speakers and Health Talks, contacts are regular with the Council on Social Agencies, the Bureau of Health Education and other Bureaus in the American Medical Association, National Society for Medical Research, Chicago Heart Association, Illinois Society for Mental Hygiene, Illinois Society for the Prevention of Blindness, Illinois Statewide Public Health Committee, Industrial Editors Association.

The Secretary addressed the Woman's Auxiliary of the Sangamon County Medical Society in Springfield October 11, and has endeavored to be of assistance, whenever possible, to all auxiliary groups.

The Committee believes it significant that three honors have been accorded to the Secretary this year—nomination for membership in the Illinois State Woman's Press Association, The Publicity Club of Chicago and the American Public Health Association.

CHICAGO INDUSTRIAL HEALTH ASSOCIATION. The Committee has extended cooperation to Dr. Frederick Slobe and the Chicago Industrial Health Association in the past year. Assistance was rendered whenever possible, particularly in the way of advice and establishing contacts for members of the staff of the Association. As an agency representative on the Medical Advisory Committee to the tape-recording of "It's Your Life" over Station WMAQ, a specialist each week attends the editing sessions of these tape-recordings. The Secretary also attends these three hour periods. The physicians who attended tape recordings for the Industrial Health Association are Drs. Charles D. Krause, John W. Huffman, Ford K. Hick, Henry Buxbaum, Wade Harker, Walton Van Winkle, Fremont A. Chandler, Hugh McCulloch, Erwin Roeser, George O'Brien, and Mr. Howard Carter.

MISCELLANEOUS. The physician members of the Educational Committee, in addition to other multitudinous activities, reviewed and criticised a 72 page manuscript for members of the Board of Education, entitled "A Guide for the Administrators of the Secondary Schools of Illinois."

The Secretary spends time, whenever necessary, with visitors from local and other state groups. Facilities and members of the staff are available to other committees whenever requested. The Secretary is also responsible for the newspages of the Illinois Medical Journal, the obituaries and the column "For the Common Good," the release of publicity to the Chicago Medical Society Bulletin and the JAMA concerning the activities of committees for which she is responsible.

The Committee wishes to acknowledge the splendid cooperation existing between the personnel of the Chicago Medical Society and the Chicago Office of the Illinois State Medical Society. This is exemplified particularly in the assistance rendered by Mrs. Esther Fraser and Miss Jean McArthur.

The Committee submits this report to the Members of the House of Delegates as evidence that its work has increased satisfactorily. It is presented as an outline only and does not attempt to measure the time of any employee in the Chicago Office in preparing and expediting the multitudinous details that are necessary for carrying out the Committee's activities. The Committee wishes to express its gratitude to the House of Delegates and the Council of the Illinois State Medical Society. The confidence of these executive groups is responsible for inspiring and guiding the Committee in fulfilling its objective of health education. The Committee also acknowledges the help and counsel rendered by Dr. Harold M. Camp, not only in his weekly visits to the Chicago Office but for his ready cooperation whenever called upon. The Committee also wishes to thank the members of the staff of the Chicago and Monmouth Offices, particularly Mr. Neal, Mr. Leary and Mrs. Zimmer. It is their ability to cooperate and coordinate that helps Illinois accomplish things instead of just talking about them.

Respectfully submitted, CHARLES P. BLAIR, M.D., *Chairman*, WARREN W. FUREY, M.D., *Vice Chairman*, FORD K. HICK, M.D., GEORGE L. DRENNAN, M.D., C. PAUL WHITE, M.D., ANN FOX, *Secretary*, *The Educational Committee*.

REPORT OF THE SCIENTIFIC SERVICE COMMITTEE

It is my privilege herewith to render again an annual report of the activities of your Scientific Service Committee.

The year 1948-1949 has been an active and satisfactory one. The listed county medical societies throughout the state have been and are receiving the services for which this Committee was originally set up.

Thus a total of 113 speakers were scheduled for twenty-seven county medical societies of the ninety-two in the state as compared with 73 speakers for twenty-two societies for the corresponding period in 1947-1948. The tabulation reveals that postcard and press services were given to DeWitt, Randolph and the Six County

<i>Societies</i>	<i>Speakers</i>	<i>Return Post-card Notices</i>	<i>Single Post-card Notices</i>	<i>Press Releases</i>
Bureau	3	1,037		47
Champaign	3			
Effingham	10		1,231	269
Dekalb	6	230		70
DeWitt			?	41
Fulton	9			
Greene	1			
Henry	3	468		62
Iroquois	2			
Kane	2			
Kankakee	9			
LaSalle	8	1,145		350
Livingston	1			
Logan	8			
Macon	4			
Marion	4	100		29
McDonough	7	1,090		274
McHenry	4	396		120
Morgan	1			
Peoria	1			
Randolph			33	
Richland	1		85	
St. Clair	2			241
Sangamon	1			
Six County: (Randolph, Perry, Jackson, Union, Williamson, Franklin)	1	750		70
Vermilion	2			
Warren	1			
Whiteside-Lee	1		214	
Will-Grundy	18			

Medical societies, but these groups scheduled their own speakers with the exception of one for Six County. In addition the St. Clair County Medical Society asked to have 241 announcements and 241 postcard notices mimeographed and mailed for a special symposium on obstetrics and gynecology, the speakers for which were scheduled by the local program committee.

That the service extended to various societies has increased is shown by the following comparison:

<i>Double Postcards</i>		<i>Single Postcards</i>		<i>Press Releases</i>	
47-48	48-49	47-48	48-49	47-48	48-49
1,965	5,116	65	1,349	570	1,769

Physicians who cooperated in the activities of the Scientific Service this past year were: Arthur F. Abt, John W. Ferrin, Franklin Corper, James H. Hutton, Eugene L. Walsh, C. H. Stuebenrauch, Jr., John L. Reichert, F. G. Norbury, Harry H. Boyle, Harry M. Hedge, Samuel M. Bluefarb, William M. McMillan, Leo K. Campbell, Edward L. Cornell, Mr. Thos. A. Hendricks, Eugene T. McEnery, Carlos I. Reed, Ph.D., Edward W. Cannady, Paul Starceovich, John Soukup, John Van Prohaska, Norman L. Baker, C. Edward

Stepan, Stuart Broadwell, Jr., Burton C. Kilbourne, Harry A. Oberhelman, Archibald Hoyne, Norbert C. Barwasser, Louis R. Limarzi, Carlo Scuderi, Harold A. Sofield, William H. Marlowe, Samuel Perlow, Lindon Seed, Thomas J. Coogan, Alfred D. Biggs, John Vonachen, Herbert Rattner, Danely Slaughter, Edward L. Compere, George V. LeRoy, William B. Serbin, Edward F. Rosenberg, James T. Jenkins, Herbert E. Schmitz, G. C. Williamson, Michael Streicher, Theodore Van Dellen, Percy E. Hopkins, Frederick Steigmann, H. L. Baker, N. Louis Campione, Eugene Hamilton, James Graham, Walter R. Tobin, Samuel M. Feinberg, Walter Mayne, Harry Leichenger, Leonard Jourdenmais, Earl Latimer, Joseph Greengard, Sidney Portis, George Hellmuth, Frank Deneen, William J. Gillesby, Harry J. Dooley, Francis E. Seneary, Wayne W. Flora, Chester Coggeshall, Peter Rosi, H. W. Wellmerling, Howard L. Alt, John Bellows, Willis H. Atkinson, Carl V. Moore, St. Louis, Hugh M. Flack, John Huffman, Gerald M. Cline, Walter Stevenson, Frank G. Dickinson, Ph.D., Roland L. Green, Ben W. Lichtenstein, Warren Cole, Lee T. Hoyt, Charles Dunham, Henry Buxbaum, Richard Allyn, Ben Z. Rappaport, Paul A. Campbell, Philip Thorek, Charles Newberger, P. H. McNulty, Frederick Slobe, Norris J. Heckel, A. R. K. Matthews, Leo P. A. Sweeney, Mr. J. W. Holloway, Jr., George H. Rezek, James J. Callahan, John T. Reynolds, Paul W. Greeley, Paul H. Holinger, Charles D. Krause, Edward G. Tatge, James W. Sours, Harvey S. Allen, John S. Scully, and Robert Levy.

Whenever a particular speaker was designated, an effort was made to reach this particular person. Substitutions were made whenever necessary.

The twenty-seven societies requesting speakers this year compares with twenty-two listed in the last annual report. This would indicate a net increase of five societies, which is inaccurate in that some of the societies included in the previous report did not seek assistance this year, while Macon, DeKalb, Greene, Iroquois, Kane, and Peoria are among those this year who used our service.

The total of 113 speakers is augmented by 6 with the inclusion of two speakers for the Northwest Branch of the American Academy of General Practice, one for the Northwestern University Dental Alumni Association, and three for the Iowa and Illinois Central District Medical Association.

McDonough, DeKalb, Bureau and Will-Grundy county societies have cooperated with the Scientific Service Committee by listing their preferences for an entire year. Thus twenty speakers are already scheduled for the period extending into the fall of 1949 and not included in this report.

That advance scheduling is important is reflected in the increased number of postcard and press announcements that are mailed from the Chicago office. Timing is important, particularly when some societies have the same meeting day and require notices.

Because it was our feeling that not enough county medical societies are availing themselves of the abundant material at their disposal, a joint meeting of the Scientific Service and Postgraduate Education Com-

mittees was held at the Bismark Hotel, Chicago, Sept. 21, 1948. It is significant that this meeting was attended by all members of both committees. Out of this session came the following suggestions: (1) that a form letter be sent to all secretaries of county medical societies asking for pertinent information on meetings and (2) That a recommendation be presented to this House of Delegates to consider the fusion of the Scientific Service Committee and the Postgraduate Education Committee under one committee and one chairmanship.

The letter to the secretaries brought the information shown on page 52.

In an effort to present as much information as possible to the House of Delegates for consideration in the recommendation that the two committees be merged, the Chairman sent a letter to forty-eight state medical societies and the District of Columbia. Of the twenty-nine replies received, twenty do not arrange for speakers for county medical societies and seven do not have any postgraduate committee. Five societies have one committee performing both functions. Most of the societies, however, have some sort of service in that the executive officers are always available for assistance. None of the states responding indicate the well organized services of both of our Committees, although it is recognized that some of the states, geographically and by their physician membership, are not able to offer or support such activities.

In conclusion it is our opinion and recommendation: (1) That County Medical Societies should be urged to a wider use of the services of this Committee, and (2) That even though the vote of the Committees was in favor of joining these two Committees the Chairman and four other members see no particular advantage in this change. On the contrary, they, the minority, deplore the passing out of existence of a Committee which, for so many years, has done a yeoman's service, a pioneer's job, in Scientific Service, and they feel both Committees should maintain their present individuality.

Respectfully submitted, ROBERT S. BERGHOFF, M.D., *Chairman*. LOUIS LIMARZI, M.D., *Vice Chairman*. ROBERT J. PATTON, M.D., WADE C. HARKER, M.D., JOHN H. GERON, M.D., CHARLES H. HULICK, M.D., HARRY A. OBERHELMAN, M.D., CHORLES D. KRAUSE, M.D., *Scientific Service Committee*.

REPORT OF THE POSTGRADUATE EDUCATION COMMITTEE

It is my privilege to submit herewith the annual report of your Postgraduate Education Committee. Members of the House of Delegates will remember that this Committee came into existence in 1939. Its function was and is to arrange Postgraduate Conferences in various Councilor Districts, the number of such conferences to be decided upon by the Council. Accordingly for the year 1939-1940 four conferences were held. Subsequently the following were scheduled:

1940-1941	Nine
1941-1942	Ten
1942-1943	Four
1943-1944	Four
1944-1945	Four

1945-1946	Four
1946-1947	Ten
1947-1948	Twelve
1948-1949	Twelve

In the current series of twelve, the following have been scheduled, as of March 15:

Dist. 1,—Nov. 10, 1948, at Rockford.
Henry G. Poncher, Therapy in Infancy and Childhood; Ralph Bettman, Intrathoracic Surgery; Paul S. Rhoads, Inhalation of Penicillin Dust: Its Proper Role in Infections of the Respiratory Tract; Percy E. Hopkins, Voluntary Prepayment Medical Care; Percival Bailey, Japanese B. Encephalitis.

Dist. 2,—Mar. 31, 1949, at LaSalle.
Arkell M. Vaughn, Vagotomy in the Treatment of Gastro-Intestinal Ulceration; Harry M. Hedge, Birthmarks; Henry G. Poncher, Some Practical Aspects of Pediatric Therapy; Chauncey C. Maher, Combination of Gallbladder Disease and Coronary Disease; Frederick H. Falls, Early Diagnosis of Carcinoma of the Uterus; Percy E. Hopkins, Voluntary Prepayment Medical and Surgical Care.

Dist. 4,—Oct. 28, 1948, at Monmouth.
Henry G. Poncher, Pediatric Therapeutics; Arkell M. Vaughn, Vagus Nerve Resection in Treatment of Peptic Ulcer; Theodore Van Dellen, Rheumatic Heart Disease; Eugene A. Hamilton, Fractures; Percy E. Hopkins, Acute Abdominal Emergencies and Prepayment Medical and Surgical Care; Harry M. Hedge, Birthmarks.

Dist. 5,—Dec. 1948, at Pekin.
William T. Carlisle, Forewarning and Forearming in Obstetrics; Chauncey C. Maher, Management of Cardiac Patients Pre and Post-Operatively; H. William Elghammer, Advances in Pediatrics; Percy E. Hopkins, Voluntary Prepayment Medical Care; Chester C. Guy, Bleeding Peptic Ulcer.

Dist. 5,—Mar. 3, 1949, at Springfield. Cancelled.

Dist. 6, Apr. 14, 1949, at Quincy.
Eugene Hamilton, Treatment of Fractures by the General Practitioner; Harry M. Hedge, Birthmarks; Warren H. Cole, Intestinal Obstruction; Arthur Atkinson, Management of Peptic Ulcer; Percy E. Hopkins, Remarks as President and Acute Abdominal Emergencies; Harold M. Camp, Remarks as Secretary; Mr. Chas. H. Meredith, Secretary, Industrial Association of Quincy, What is Actually Going On in Washington; Chauncey C. Maher, Preparation and Care of the Cardiac Patient During Surgery.

Dist. 7,—Sept. 16, 1948, at Centralia.
Warren H. Cole, Surgical Lesions of the Stomach; Israel Davidsohn, Clinical Applications of the Rh Factor; Noel Shaw, Feeding Problems in Infants; Allergic Conditions in Children and Treatment of Congenital Syphilis with Penicillin; Hugo Roney, Hormone Preparations and Their Uses; Lester D. Odell, Cesarean Section; Robert E. Britt, St. Louis Psychosomatic Medicine.

Dist. 8,—Apr. 21, 1949, at Danville.
Don Sutton, The Use of Anticoagulants in Vascu-

<i>County</i>	<i>Meets</i>	<i>Meeting Date</i>	<i>Who Arranges Program</i>	<i>How Obtained</i>	<i>Publicity</i>	<i>Medium</i>	<i>Joint Meeting</i>
Adams	Monthly except July and August	2nd Monday p.m.	Secretary	Personal Contact and List of Speakers	Secretary	Radio and Press	Occasionally
Alexander	1 a year	Varies	No one				
Bond	Monthly	Last Wednesday	Secretary	Films only	Secretary	Newspapers	No
Boone	Monthly	2nd Tuesday	Program Chm.	Too small for Speakers	Secretary		
Bureau	Monthly except June, July, and August	2nd Tuesday	Program Chm. and Sci. Serv. Com.	Personal Contact and Sci. Serv. Com.	Sci. Serv. Com.	Post Cards, Press	No
Carroll	Irregularly	No	Pres. & Secy.	Personal Contact	Secretary	Correspondence	Jo Daviess
Cass	Monthly	2nd Thursday	Program Chm. and Sci. Serv. Com.	Sci. Serv. Com.			No
Champaign	Monthly	2nd Thursday p.m.	Sci. Serv. Com. Program Chm.	Personal Contact	Secretary	Post Cards	
Christian	Monthly except June, July and August	2nd Thursday p.m.	Program Chm.				
Clark	2 or 3 times a year	No	Pres. & Secy.	No Speakers	Secretary	Correspondence	
Clay	Monthly	2nd Wednesday	Pres. & Secy.	Personal Contact	Secretary		
Clinton	Monthly	2nd Wednesday	Pres. & Secy.	Personal Contact	Secretary		1 a year with Marion Co.
Coles-Cumberland	Bi-Monthly	Last Wednesday	Secretary	Program Chm.	Secretary	Correspondence	No
Crawford	Monthly except July and August	4th Tuesday	Program Chm.	Sci. Serv. Com.	Sci. Serv. Com.	Post Cards, Press	No
DeKalb	Monthly	2nd Wednesday	Program Chm.	Secretary and Sci. Serv. Com.	Secretary		Occasionally
DeWitt	Monthly	Last Thursday, 12:30 Luncheon	Officers	Personal Contact and Sci. Serv. Com.	Secretary		No
Douglas	Monthly	3rd Wednesday	Program Chm.	Personal Contact and Sci. Serv. Com.	Secretary		No
DuPage	Monthly except July and August	3rd Wednesday	Program Chm.				
Edgar	Monthly	3rd Thursday, 7:30	Program Chm.	Sci. Serv. Com.	Sci. Serv. Com.	Post Cards, Press	
Edwards	Not active	No	Secretary	Personal Contact			
Effingham	Irregularly	2nd Wednesday	Secretary	Secretary	Secretary	Post Cards, Press	Perry, Randolph, Union, Jackson, Williamson
Fayette	Monthly	No	Secy. & Sci. Serv. Com.	Sci. Serv. Com.	Secretary	Correspondence	No
Ford	Monthly	1st Monday	Secretary	Personal Contact	Secretary		No
Franklin	Monthly	2nd Friday, Mar., June, Sept., Dec.	Sci. Serv. Com.	Sci. Serv. Com.			
Fulton	Monthly except July and August	2nd Thursday	Secy. and Sci. Serv. Com.	Sci. Serv. Com.	Sci. Serv. Com.	Post Cards, Press	No
Gallatin	Monthly	6:30 dinner	Sci. Serv. Com.	Sci. Serv. Com.	Sci. Serv. Com.	Post Cards, Press	No
Greene	Quarterly	3rd Tuesday, 6:30 dinner	Sci. Serv. Com.	Sci. Serv. Com.	Sci. Serv. Com.	Press	No
Hancock	6 times a year	No	Secretary	Personal Contact	No		See Franklin
Hardin	Monthly except June, July and August						
Henderson	Monthly						
Henry							
Iroquois							
Jackson							

County	Meets	Meeting Date	Who Arranges Program	How Obtained	Publicity	Medium	Joint Meeting
Jasper Jefferson-Hamilton Jersey	1 a year	No	President	No speakers	No.		Occasionally with Green Co.
Jo Daviess Johnson Kane	Not active Feb., April, June, Oct., Dec. Monthly	2nd Wednesday	Sci Serv. Com.	Sci. Serv. Com.			
Kankakee		2nd Friday noon luncheon	Sci. Serv. Com.	Sci. Serv. Com.	No.		
Knox	1 a Month except June, July and August Monthly	3rd Thursday, 6:00 dinner	Program Chm.	Personal Contact	Secretary	Correspondence	No
Lake LaSalle	Monthly	2nd Tuesday	Program Chm. Sci. Serv. Com.	Personal Contact Sci Serv. Com.	Publicity Com. Sci. Serv. Com.	Bulletin Press, Post Cards	No Occasionally Bureau Co.
Lawrence Lee	Monthly Irregularly	1st Wednesday Irregular	Pres. & Secy. Program Chm. and Sci. Serv. Com.	Personal Contact and Personal Contact and Sci. Serv. Com.	None Sci. Serv. Com.	Post Cards, Press	Whiteside Co.
Livingston	Irregularly	Irregular	Personal Contact and Sci. Serv. Com.	Personal Contact and Sci. Serv. Com.			
Logan	Monthly	3rd Thursday	Sci. Serv. Com.	Sci. Serv. Com.	Sci Serv. Com.	Post Card, Press	No
McDonough	Monthly except June, July, Aug., and Sept.	4th Friday, 6:30 dinner	Sci. Serv. Com. and Program Chm.	Sci. Serv. Com.			
McHenry	Monthly	3rd Thursday 8:00 p.m.	Sci. Serv. Com. And Secy.	Sci. Serv. Com.	Sci. Serv. Com.	Post Card, Press	No
McLean	Monthly except July and August Monthly	2nd Tuesday	Personal Contact	Occasionally Sci. Serv. Com.	Public Rel. Com.	Radio, Press	
Macon		3rd Tuesday	Program Chm. and Sci. Serv. Com.	Sci. Serv. Com.		Post Cards, Press and Bulletin	No
Macoupin	Jan., March, May, July, Sept. and Nov.	4th Tuesday	Personal Contact and occasionally Sci. Serv. Com.	Personal Contact and occasionally Sci. Serv. Com.	Secretary	Correspondence	
Madison	Monthly	1st Thursday, 8:00 p.m.	Sci. Serv. Com.	Personal Contact	Secretary	Bulletin	No
Marion	Monthly	3rd Thursday p. m.	Secretary and Sci. Serv. Com.				
Mason							
Massac Menard	Monthly Irregularly	2nd Wednesday Irregular	Pres. and Secy. Pres. and Secy.	No. Speakers No. Speakers			No
Mercer							
Monroe	Monthly	3rd Thursday	Secretary	Personal Contact	Secretary	Press	No
Montgomery* Morgan	Monthly	2nd Thursday	Secretary	Personal Contact and occasionally Sci. Serv. Com.	Secretary	Post Cards, Press	No
Moultrie Ogle Peoria	1 a year About 3 times a year Monthly; occasional special meetings	No regular date No regular date 3rd Tuesday	Pres. and Secy. Secretary Pres. and Secy.	Personal Contact Personal Contact Personal Contact	Secretary Secretary	Post Cards	No No

<i>County</i>	<i>Meets</i>	<i>Meeting Date</i>	<i>Who Arranges Program</i>	<i>How Obtained</i>	<i>Publicity</i>	<i>Medium</i>	<i>Joint Meeting</i>
Perry	Monthly	1st Monday	Pres. and Secy.	Personal Contact and Sci. Serv. Com.	Sci. Serv. Com.	Post Cards, Press	See Franklin
Piatt							
Pike	Jan., March, May, July, Sept., Nov.	4th Thursday	Secretary (every other month—local speaker)	Personal Contact	Secretary	Press	No
Pope							
Pulaski							
Randolph	Monthly; bus. meet. every 3 mos.	4th Thursday	Secretary	Personal Contact	Secretary and Sci. Serv. Com.	Post Cards, Press	See Franklin
Richland							
Rock Island	Monthly except June, July and August	2nd Tuesday	Program Com.	Personal Contact	Secretary	Post Cards, and Correspondence Bulletin	No
St. Clair	Monthly except July and August	1st Thursday	Program Com. and Secretary	Personal Contact	Secretary	No	No
Saline	Monthly except June, July and Aug.	Last Monday	Pres. and Secy.	Personal Contact	Secretary	Correspondence and Phone calls	No
Sangamon	Monthly except July and August	1st Thursday except holidays	Program Com.	Personal Speakers and Sci. Serv. Com. occasionally	Program Com.	Bulletin and Posters	No
Schuyler							
Shelby	Monthly	2nd Monday	Secretary	No Speakers	Secretary	Correspondence and Press	No
Stephenson	Monthly except June, July and August	Either 3rd or 4th Thursday	Pres. and Secy.	Personal Contact	Secretary	Post Cards, Press	No
Tazewell	Monthly	1st Tuesday, 6:30 p. m.	Secretary	Personal Contact	Secretary	Correspondence and Press	No
Union							
Vermilion	Monthly	1st Tuesday	Program Chm.	Personal Contact	Secretary	Bulletin	No
Wabash	Indefinite	Indefinite	Secretary	Sci. Serv. Com.	Secretary and Sci. Serv. Com.	Post Cards, Press	Gibson Co., Ind.
Warren	Quarterly	Indefinite	Serv. Com.			Correspondence	No
Washington							
Wayne	Monthly	3rd Thursday p. m.	Secretary	No Speakers	Secretary	Press	No
White							
Whiteside	Monthly except June, July and August	3rd Thursday	Sci. Serv. Com.	Personal Contact and Sci. Serv. Com.	Sci. Serv. Com.	Post Cards, Press	See Lee
Will-Grundy	Bi-Monthly	2nd and 4th Thurs. 12:00 luncheon	Secretary	Sci. Serv. Com.	Secretary	Correspondence	No
Williamson	Monthly	1st Tuesday after 1st Monday	Secretary	Personal Contact	Secretary	Press	See Franklin
Winnebago	Weekly (Oct.-June) Monthly (Oct.-June)	Friday noon	Officers	Personal Contact and Sci. Serv. Com.	Publicity Com.	Bulletin, Press	No
Woodford	Monthly except in winter months	2nd Tuesday	Secretary	Personal Contact	None		No

lar Disease; Leonard Weber, Contact Dermatitis (Eczema); Michael H. Streicher, Constipation: Clinical Application in Its Management; Eric Oldberg, Diagnosis and Treatment of Head Injuries; Frederick A. Jostes, Some Aspects of the Diagnosis and Treatment of Low Back Pain; Richard Capps, Liver Function: Practical and Theoretical Aspects.

Dist. 9,—Sept. 22, 1948, at Harrisburg.

O. P. J. Falk, St. Louis, Practical Points in the Management of Cardiovascular Problems; Ransom Buchholz, Evansville, Ind., Congenital Abnormalities of the Newborn Amenable to Surgical Therapy; Danely P. Slaughter, Office Diagnosis of Accessible Cancer; Samuel J. Taub, Recent Advances in the Diagnosis and Treatment of Asthma; Noel Shaw, The Rh Factor in Newborn; F. Garm Norbury, Jacksonville, Acute Infections of the Nervous System; R. K. Gilchrist, Surgery of the Colon from the General Practitioner's Standpoint.

Dist. 10, Apr. 7, 1949 at Du Quoin. Kilian F. Fritsch, East St. Louis, Rehabilitation of the Victim of Poliomyelitis; Edward H. Reinhard, St. Louis, Diagnosis and Treatment of Hemorrhagic Disorders; G. Lynn Krause, St. Louis, Diagnosis and Surgical Treatment of Polypi in the Large Intestine in Infants and Children; Willard O. Thompson, Diseases of the Adrenals; Harry M. Hedge, Birthmarks; Walter Stevenson, Quincy, Remarks as President-Elect and Crossed Eyes—A Medical and Economic Problem.

Dist. 11, Undetermined. For the first time, Springfield through the Sangamon County Medical Society requested a Postgraduate Conference. The program was scheduled for March 3 and the following speakers had accepted the invitation to participate: Paul Campbell, Dizziness; Edward Allen, Vaginitis; Percy E. Hopkins, National Compulsory Health Insurance; George E. Wakerlin, Pathogenesis and Treatment of Glomerulonephritis; William S. Hoffman, Calcium and Phosphate Metabolism, and Karl Meyer, Management and Treatment of Complications of Gastric and Duodenal Ulcers.

Dr. James Graham, program chairman of the Conference in Springfield, canceled the Conference, when he learned that the date set was in conflict with the Clinical Conference of the Chicago Medical Society. Dr. Graham and the Sangamon County Medical Society are to be congratulated on their decision. It is this unity that marks the progress of the medical profession of Illinois.

The comment of the Postgraduate Education Committee concerning these conferences is as follows:

1. They constitute a very important and necessary factor in the scientific progress of a state medical society.
2. They are popular and well attended.
3. They should definitely be continued and as presently conducted—as one day conferences.

In conclusion both the Scientific Service and the Postgraduate Committees, wish to express their appreciation of the whole-hearted cooperation of Miss Ann Fox, Mrs. Kathryn Simmons and their associates

in the Chicago office, as well as that of the Monmouth office in this important work.

Respectfully submitted, ROBERT S. BERGHOFF, M.D., *Chairman*, GEORGE A. HELLMUTH, M.D., *Vice Chairman*, WARREN H. COLE, M.D., FRANK DENEEN, M.D., F. GARM NORBURY, M.D., CHARLES O. LANE, M.D., N. C. BARWASSER, M.D., *Postgraduate Education Committee*.

REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

For the second consecutive year, the Committee on Medical Economics has fulfilled its objective of contributing one monthly article to the *Illinois Medical Journal*. Articles published and not included in last year's report were: "The Patient—A Human Being," April, 1948; "Medical Education of the General Practitioner," May, 1948.

Since then, the following original papers were published: "Medical Care of the Recipients of the Illinois Public Aid Commission," June, 1948; "Economic Significance of Pre-Employment Examinations," July, 1948; "Vacations," August, 1948; "Premarital Tests and Marriage Counseling," September, 1948; "The Pathologist in Group and Hospital Practice," October, 1948; "The Economic Conflict in Anesthesiology," January, 1949; "The Role of the General Practitioner in the Modern Hospital," February, 1949; "Admission to Medical School," March, 1949; "Medical Benevolence Fund," April, 1949.

Two years ago the Committee instituted the system whereby a backlog of articles was prepared. This has worked out so successfully that the Editor of the *Illinois Medical Journal* has had on hand regularly two articles ready for publication, while one or more were in process of being mimeographed for distribution to the Committee. Thus at the time this report is written, two articles are ready for publication.

It is significant that with the consistent and loyal efforts of some members of the Committee there has been a let-down by others. In spite of periodic reminders to Committee members that their contributions were due, the articles were not submitted. On February 15, the last reminder was sent to these members which, at the time this report was prepared, had met no response in the Chicago Office. This is unfortunate because the responsibility of meeting the Committee's obligation has fallen to eight of the sixteen members of the Committee. Two articles were the work of non-members of the Committee who were invited to prepare guest editorials because of the medical-economic interest in their particular fields. The members of the Committee who prepared two or more articles are to be congratulated, for it is their effort that has enabled the Committee to meet its obligation.

In September, 1948, Dr. Emmet B. Bay resigned, which resignation was accepted with reluctance by the Committee.

The Committee on Medical Economics, in keeping with its policy of holding one meeting a year, met during the last Annual Session, Monday, May 10. There was some variation in the thoughts of members as to the value of a monthly article on medical economics, but

it was the consensus of opinion that it afforded a great opportunity to discuss impartially the numerous economic conflicts within the medical field. The very dissidence of the members present at this meeting was considered a yardstick that reflected the thoughts of persons engaged in the practice of medicine, stemming from the obstacles and encroachments encountered in their daily practice.

The suggestion to "poll" the members of the Illinois State Medical Society was rejected after a lengthy discussion. Several times during the session, the Chairman introduced the thought that perhaps the scope of the Committee could be enlarged and that perhaps a richer fulfillment of the Committee's objective could be reached through a closer working relationship with other committees.

The positive advice in this action is pertinent in view of the happenings in Washington the past year. There is no doubt now that the present administration tends to socialized medicine. The threat is no longer imminent—it is here and it behooves every member of the Committee to assume the leadership in staving off further encroachments into medical practice. With bureaucratic invasion looming high on the horizon of medical practice the responsibility of this Committee is of paramount importance.

It is the recommendation of this Committee that every avenue of approach be explored and expressed in our monthly contributions to awaken lethargic members of the profession. To let George do it is not enough. We must all participate in this war of Washington bureaucrats. We must fight their propaganda to the public.

This Committee pledges its support to the work of other Committees, particularly the Committee on Medical Service and Public Relations, the Scientific Service, Postgraduate Education and Educational Committees. It pledges its support to the Council and this House of Delegates in carrying out any recommendation that may be submitted.

The Committee again wishes to specifically commend Miss Ann Fox for her untiring efforts and her perfection in liaison with the *Journal* staff.

Respectfully submitted, CHAUNCEY C. MAHER, M.D., *Chairman*, HUBERT L. ALLEN, M.D., EDWIN F. BAKER, M.D., CARROLL BIRCH, M.D., THOMAS C. BROWNING, M.D., ROLAND R. CROSS, M.D., JAMES GRAHAM, M.D., GEORGE H. HALPERIN, M.D., EDWIN S. HAMILTON, M.D., FORD K. HICK, M.D., EDWIN F. HIRSCH, M.D., JAY McDONALD MILLIGAN, M.D., MARIE WESSELS, M.D., WALTER M. WHITAKER, M.D., HOLLAND WILLIAMSON, M.D., *Committee on Medical Economics*.

REPORT OF THE CHAIRMAN OF ADVISORY COMMITTEE, STATE COMMISSION ON THE CHRONICALLY ILL

Three years ago when the Governor appointed a commission to investigate the care of the chronically ill it was done on recommendations made by the State Legislature. An Advisory Committee was appointed by the State Medical Society to work with this group of

legislators and as a result a rather careful survey was made of the problems which have to do with the care of this type of individual. Your committee met with the commission on several occasions and it is felt that we were able to be of definite assistance to them in avoiding the usual errors a non-medical commission would be apt to make. The two groups worked together very satisfactorily and were able to supplement each other's needs. Certain recommendations were made by the commission and they were recommendations with which your committee could find no fault. They did not go through the last legislature because of the last minute rush in legislative affairs and because of an attempt on the part of the administration to hold down expenses. The results of the commission's deliberations were published in the "Second Interim Report" concerning care of the chronically ill in Illinois—published June, 1947. This 279 page volume is worth consideration and study by anyone interested in this work.

There was always a possibility that this might be reviewed and brought up on the legislative floor during the past session of the legislature and therefore your Advisory Committee was reappointed to be used in the event that there was such need. Since this was not brought up there has been no need for activity on the part of the committee and no meetings have been held. However, your committee has been available and ready in the event of need.

We feel at the present time that the committee should perhaps be continued merely as a precautionary measure, to be serving without any particular function unless the present administration decides to go into this problem all over again. In this event no doubt a new commission will be appointed, the members of which will have no familiarity perhaps with the work that has been done before. So in order to give them the necessary medical viewpoint it will be wise to have a committee continue to be available in the event of need. The only report at the present time is one availability in the event that the committee may be called upon.

Respectfully submitted, E. P. COLEMAN, M.D., *Chairman*, F. LEE STONE, M.D., W. W. FULLERTON, M.D., G. E. JOHNSON, M.D., CHARLES ALLISON, M.D., *Advisory Committee to State Commission on the Chronically Ill*.

REPORT OF THE FIFTY YEAR CLUB COMMITTEE

In January, 1938, the Council of the Illinois State Medical Society, realizing that many physicians in the State had been practicing medicine for fifty years or more, and wishing to do them just honor, organized the Fifty Year Club. The Club is a phantom organization without officers, dues, or meetings. Those physicians, whether members of the Society or not, who have been in the practice of medicine for fifty years or more, and are so recommended by their county Society, are eligible to membership.

Many county societies throughout the State hold special meetings to honor these "grand old men of medicine." To these meetings, not only the physicians in their Society, but the physicians in surrounding counties

are invited to attend, also their ladies and many personal friends who are not physicians.

At these meetings, the candidates are presented with a certificate of membership signed by the president and secretary of the State Medical Society, and also by the chairman of the Council. They are also given a lapel button that has inscribed on it, "Illinois State Medical Society. Fifty Year Club."

Since the authorization of this club 11 years ago, certificates have been issued to 652 members. It is not possible to give an accurate number of the physicians who are now members of the Fifty Year Club, as the mortality of these men is quite high and deaths are not promptly reported to the secretary of the Society. But the best of my knowledge, the present membership is 362, distributed as follows:

208 Downstate.

137 Chicago.

17 Residing in states outside of Illinois.

This is the largest membership we have ever reported and indicates that medical science is prolonging the span of life and that more physicians are becoming eligible to membership in the Fifty Year Club. For the past three years, the Illinois State Society has given a complimentary banquet to the members of this club. Each year an invitation is sent to every member inviting him to attend his luncheon, which is held at noon during the last day of the Illinois State Medical Society meeting. These get-together luncheons of physicians who have been practicing medicine for 50 years or longer is one of the most interesting groups sponsored by the Illinois State Society. No speeches are listed at these luncheons, but each member is given an opportunity to give an account of the most interesting or most amusing case encountered in his practice. These talks are limited to 5 minutes.

Respectfully submitted, ANDY HALL, M.D., *Chairman*, CHANNING W. BARRETT, M.D., E. H. OCHSNER, M.D., H. O. MUNSON, M.D., *Fifty Year Club Committee*.

REPORT OF THE COMMITTEE ON INDUSTRIAL HEALTH

During the past year your Committee on Industrial Health has been mindful of the increasing importance of the study of illness among industrial workers and its implications in the revolutionary changes in medical practice contemplated by certain governmental agencies. We call to your attention that there have been an increasing emphasis on the presumption that the health of the employee is a major responsibility of his employer regardless of the cause of illness or disability. Greater demands are being placed on management to maintain medical and hospital benefits, sickness and accident insurance and welfare funds as an answer to the health needs of the worker. There is a tendency for this type of coverage with scheduled and limited benefits to extend to families and dependents of workers. This protection is frequently purchased at a minimum cost by payroll deductions and cancels out with unemployment. With variables in the stability of our industrial economy this type of protection affords a false sense of security.

Employee-Relations departments of industry are giving greater concern to the health problems of their workers—one large national employer has recently shifted the handling of personnel problems of his workers to the Medical Department. This widening field of industrial health responsibility places on the physician in industry the need of specialized training in administrative function as well as a sound medical and surgical education.

Your committee has participated with interest and frequently with action in the development of publicity on health among industrial workers—particularly on radio programs.

There is definite need in Illinois for a Division of Industrial Hygiene maintained as a fact-finding agency from which physicians, workers, employers, governmental agencies or any interested party may obtain unprejudiced and scientific assistance on problems affecting the relationship of illness to working environment. This need in the field of occupational medicine is almost entirely a health adjusting facility and the responsibility for its effectiveness should rest with the medical profession of our State.

The American Medical Association through the Council on Industrial Health has recognized the need for concern in the purpose and functioning of the Workmen's Compensation laws of the various States and is conducting a study through an appointed committee. Your committee commends this inquiry.

The committee wishes to express its appreciation to the various members of the Illinois State Medical Society who have participated with us in meetings, discussions, conferences and publication of papers on special aspects of Industrial Health.

Respectfully submitted, JOSEPH H. CHIVERS, M.D., *Chairman*, R. I. BARICKMAN, M.D., O. B. BOYD, M.D., R. J. BENNETT, JR., M.D., C. O. SAPPINGTON, M.D., H. A. VONACHEN, M.D., *Committee on Industrial Health*.

REPORT OF ADVISORY COMMITTEE SURVEY ON CHILD HEALTH, AMERICAN ACADEMY OF PEDIATRICS

The Illinois Survey of Child Health Services has been completed. A copy was placed in the hands of each member of the Committee on February 14, 1949. A meeting of this Committee was held at the LaSalle Hotel Sunday, February 27, 1949. All members of the Pediatric Committee were present as was Dr. Henry Poncher, formerly State Chairman of the American Academy of Pediatrics under whose sponsorship this work was conducted. Dr. Kleinschmidt also attended the meeting.

Several changes have been advised in the hope of reducing it to a more concise form. It is now in the process of being revised.

After this is completed it will again be presented to the Committee and the final report and recommendations will be presented to the Council.

It is the desire of the group to have this work completed in order that it may be presented at the April meeting of the Council.

Respectfully submitted, JOHN F. CAREY, M.D.,
Chairman, GERALD CLINE, M.D., W. L. CRAW-
FORD, M.D., GEORGE L. DRENNAN, M.D.,
JULIUS H. HESS, M.D., E. T. McENERY, M.D.,
*Advisory Committee on Child Health Service, Advisory
Committee, Survey on Child Health Service, American
Academy of Pediatrics.*

REPORT OF THE COMMITTEE ON VOLUNTARY PRE- PAYMENT PLANS FOR MEDICAL AND SURGICAL CARE

The importance of our voluntary prepayment insurance program has been tremendously enhanced since it emerged from all the planning of recent months as the keystone of the long-term campaign against compulsory sickness insurance. Although it has, of course, been urged by organized medicine for several years, even greater emphasis is placed on it now, for, in all the strategic decisions of the campaign-planners, voluntary insurance holds first place among our weapons. Broad general acceptance of the voluntary policies will eliminate the need for federal compulsion.

The first duty of this committee, therefore, in reporting on the status of voluntary prepayment insurance to this house, is to reiterate these facts again and to urge once more that each delegate take back to his home society renewed appeals for every member to bring as many persons or groups as possible under some form of voluntary insurance against the costs of medical care.

1. An important event of the last year in this field has been the establishment by the Chicago Medical Society of the Chicago Medical Service, a Blue Shield Plan in cooperation with the Blue Cross Plan. Within the few short months of its existence this plan has shown substantial progress in bringing sizeable groups of employees under the banner of voluntary prepayment, and it is expected that, by July 1, 1949, close to 100,000 persons will have been insured. With an aggressive committee and the facilities of Blue Cross behind it, this plan will undoubtedly speed up the process of obtaining wide voluntary coverage. Rock Island County is about to start another Blue Shield Plan, while Winnebago County has an independent plan practically in operation.

2. The Illinois Plan, operated through private insurance carriers under the sponsorship of the Illinois State Medical Society, has meanwhile made steady progress. At present four insurance companies are selling the policies approved by the Society, one of them to individuals as well as to groups. These companies are: Aetna Casualty and Surety Company, Illinois Mutual Casualty Company, Metropolitan Casualty Insurance Company, and North American Accident Insurance Company. (The approval originally granted to a fifth company has been temporarily suspended, while a sixth has been removed from the lists.) Meanwhile efforts to interest additional companies are continuing. Recently a series of invitations to desirable companies has been issued.

Upwards of 85,000 persons had come under the coverage of the policies sold by these companies at the latest tally, with many more in prospect. One of the four

companies, it is interesting to note, has recently written an approved policy covering the employees of the American Medical Association headquarters in Chicago.

3. The committee observes with regret that some of the major private insurance companies have so far failed to realize the importance of this type of insurance to the public, to themselves and to the medical profession, and have not yet submitted their sickness indemnity policies for our consideration, though all of them are selling such policies. It is possible, as a result, that the utilization of other types of insurance, such as medical care sponsored by consumer co-operatives and labor unions and Blue Shield service plans, should be considered for Illinois to supplement the coverage afforded by private insurance companies. Plans based on such principles are apparently thriving in other states to the satisfaction of both the general public and the medical profession. And, since our aim is to obtain the fullest possible coverage of the general public with voluntary insurance in order to defeat compulsory federal sickness insurance, we should not exclude such programs from our thinking.

4. Your committee has also been active in the organization of The Conference of Medical Prepayment Plans, composed of representatives of state medical societies with plans operated through private insurance carriers.

Your committee first helped sponsor an organization meeting in Chicago during the A. M. A. annual meeting in June, 1948, and then took part in a second meeting during the A. M. A. interim session in St. Louis in December, 1948. Further meetings are to be held. In addition to Illinois, Wisconsin, Minnesota, Rhode Island, Maine, Tennessee, Arkansas and South Dakota are represented in this group.

The purpose of the Conference is to provide a medium for exchange of ideas and experiences on services, enrollment and other problems common to those societies working out their programs through private insurance companies. The Conference was established with the full knowledge and encouragement of the Council on Medical Service of the A. M. A. and it has met with that Council. A member of the Council staff has been assigned to assist the Conference in its work and to further its aims.

5. With the great intensification of the campaign to defeat federal compulsory sickness insurance, growing out of the new activities of the A. M. A., plans are being drawn for a corresponding promotion of voluntary insurance in Illinois, to take advantage of the public interest aroused by the campaign and to carry out its aims.

The pamphlet describing the Illinois Plan has been again re-edited and brought up to date and a large printing has been prepared for wide distribution throughout the state. The demand for it is increasing. It has been sent to all county secretaries and postgraduate and other meetings. It is possible that a smaller pamphlet or leaflet, emphasizing selling points rather than descriptive, may be prepared. At the same time, a pamphlet describing the Blue Shield Plan is being distributed through Society agencies in Cook County.

6. A new revision of the basic principles guiding the Illinois Plan's operations has also been drawn up by this committee.

Respectfully submitted, PERCY E. HOPKINS, M.D., *Chairman*, WARREN W. FUREY, M.D., *Vice Chairman*, EDWIN S. HAMILTON, M.D., CHARLES P. BLAIR, M.D., DAVID B. FREEMAN, M.D., E. G. QUATTLEBAUM, JR., M.D., HARRY M. HEDGE, M.D., HAROLD M. CAMP, M.D., WALTER STEVENSON, M.D., JOHN W. NEAL, *Committee on Voluntary Prepayment Plans for Medical and Surgical Care*.

THE PRESIDENT: I wish to make a supplementary report.

Conforming to the principle of encouraging greater enrollment in and utilization of all types of voluntary prepayment medical care plans, the committee has continued its conferences with representatives of organized labor in Illinois and is of the opinion that, under suitable and commonly accepted safeguards, the Illinois State Medical Society should cooperate in encouraging the establishment of consumer-sponsored not-for-profit medical care plans in Illinois and it so recommends.

The committee further recommends that the Illinois Plan be expanded to include voluntary not-for-profit prepayment plans commonly in use and adaptable to Illinois and that the committee be authorized to proceed with the organization of such plans.

REPORT OF THE MATERNAL WELFARE COMMITTEE

The Maternal Welfare Committee has held three meetings in Chicago during the year. The principal order of business has been the study of the data collected by Dr. Newberger of the Division of Maternal and Child Hygiene of the Illinois State Department of Public Health. The histories of all pregnant women who died in Illinois during 1948 (excluding the Cook County Committee of Chicago) were carefully studied by the committee and each case was evaluated as to preventability or non-preventability. The material was reviewed anonymously. The committee members knew neither the name of the doctor or the hospital concerned with the death. The reports of the committee and of the deaths are kept in the Educational Offices of the Illinois State Medical Society to prevent possible misuse of this information by lay writers or others. Any doctor wishing a report of the committee findings of his own case, may, by writing to the chairman of the committee, obtain a statement of the analysis of the case. This information is withheld from all others.

So far as the committee is aware there has been no opposition to its activity. Most of the doctors whose cases have been studied have seemed anxious to further this work. The committee has enlisted the support of the members of the Illinois Obstetrical and Gynecological Society and they have been helpful.

The committee has cooperated with the Maternal Welfare Committee of the Illinois Obstetrical and Gynecological Society in helping to organize an obstetrical division of the staffs of all hospitals of the state doing maternity work, to the end, that problems peculiar to

this type of medical practice will receive proper attention in all institutions.

Committee members in various councilor districts have appointed men in each county to study the problems of maternal welfare and bring to the committee recommendations for improvement in maternal service throughout the state.

It is significant to note that the maternal death rate for the state has sunk to an all time low rate of 0.72 per 1,000 live births in 1948.

Respectfully submitted, F. H. FALLS, M.D., *Chairman*, J. C. CAREY, M.D., W. I. LEWIS, M.D., J. B. WALLER, M.D., M. E. BITTER, M.D., R. R. LOAR, M.D., CARL GREENSTEIN, M.D., W. R. YOUNG, M.D., J. T. O'NEILL, M.D., W. C. SCRIVNER, M.D., A. B. OWEN, M.D., *Maternal Welfare Committee*.

REPORT OF THE MEDICAL ADVISORY COMMITTEE TO THE ILLINOIS PUBLIC AID COMMISSION

As in your committee's report for the last two years, this Annual Report contains a mixture of both good and bad.

Your committee has continued to maintain very favorable relations with the Illinois Public Aid Commission and has been, we believe, a considerable factor in helping maintain a high grade of care for the recipients of Public Assistance in the state, in conserving tax resources, and also in upholding the interests of the profession. We feel that we have been effective in reducing the amount of paper work involved and have continued to have the unqualified support of the Department of Public Assistance in doing what can be done by them to keep the collection of physicians' accounts as high as possible.

In doing this numerous problems have arisen. With the recent trend towards the development of new drugs, some of which are astoundingly high in price, it has been important to attempt to keep drug charges down to a reasonable minimum, still without interfering with the right of the individual physician to prescribe as he sees fit so long as it is kept within reasonable limitations brought about by the amount of funds available. The local medical advisory committees have increased in number and efficiency as time has gone by and the problems referred to the State Advisory Committee, other than those of general policy, are not as numerous as they formerly have been. This is a desirable condition because the State Advisory Committee, when compelled to act upon a problem that is local in scope, has to use its best judgment without sometimes a complete knowledge of the local situation. Your committee has undoubtedly made mistakes but has tried to keep them to a minimum and has tried to correct any errors which have been discovered whenever possible.

Many of the problems from the standpoint of the medical profession are due to a lack of knowledge of the program in its fundamentals and it seems necessary to repeat this. First of all, this is a Federal

program, it is part of the law of the country and as such will have to be complied with as is true with other similar types of legislation. In facing a Federal program which has major medical responsibilities, it is far better to go along in an advisory capacity than to oppose it because there are some things about it we do not like. The amount of funds is limited and the fee schedule has of necessity been adjusted to that applicable to the low income group. Furthermore, due to the wording of the Federal legislation, it is impossible for Federal funds to be used to pay the doctors directly. In cases that are hospitalized the hospital bill is paid with state funds only and therefore it is possible to have direct payment to the hospital. This constitutes only a small amount of the general fund used and the Federal funds are used for a major portion of the medical care program. Attempts have been made repeatedly to obtain direct payment but so far they have been unsuccessful. As was predicted last year, due to the reduction in the budget for the biennium, a decided deficit has developed and a deficiency appropriation is now being asked for. Shortly after this meeting a new budget will be considered by the State Legislature which will be somewhat in excess of that requested two years ago. The amount of this appropriation will determine whether or not any changes in the fee schedule will be possible. A year ago we were able to report an increase in surgical fees which made this program much more satisfactory to most of the communities in the state. Further increases have been discussed with the Public Aid Commission but nothing can be decided upon until the new budget and appropriation have been approved. The type of fee bill which has had the least improvement is that of the office and house visit and we are hopeful of achieving an increase in both of these, but again we will have to wait until the appropriation has been passed.

This Federal Aid Program is a part of the Social Security System and as such has many things which are objectionable. It has had a definite popular appeal and undoubtedly is here to stay. It is interesting to note that in Illinois the program has been administered by a group who are remarkably free from partisan politics and who have been working honestly and efficiently and doing a remarkably good piece of work. For example, the overhead of administration of this program averages around five per cent whereas in the other large states, such as Pennsylvania, New York, and California, the administrative costs are around fifteen per cent. The medical program in Illinois has been more effective than in many other states according to reports and the Illinois program, with the medical profession acting in an advisory capacity, is being copied in other states. The program has been highly successful in downstate areas. In Chicago it is only partially used and medical care is allowed in the home but not in hospitals because of the restrictions made by the hospital management itself. It is hoped that an agreement will finally be made with the Chicago

Medical Society, the hospitals of Chicago, and the Public Aid Commission so that doctors can be paid for the hospital care of their own patients instead of having them on the charity service as is done at the present time.

Your committee has held meetings almost monthly at the same time the Council Meetings are held and any problem of urgency is taken care of by mail in the interim. While a few cases of abuse on the part of the doctors have been reported, most of them are due to misunderstanding and the great majority have been settled easily and amicably. There are a few exceptions to this statement. Your committee is still of the opinion that the local advisory committees are a very important adjunct in this program and also that they are a great factor in developing local medical leadership in each community. It is quite probable that they will be called upon to act in a local advisory capacity in other situations which may be developing within the next year; for example, the United Mine Workers Health and Sickness Fund. In any of the cases that have been called to the attention of the committee in reference to abuses every effort has been made to protect the interest of both the patient and the doctor involved. This has been done to the best of our ability insofar as was consistent with good public policy. It should be recognized that there are a few circumstances which cannot properly be defended.

In retrospect it appears to the committee that the service rendered by the commission is a valuable one to the aged and the children who are otherwise wards of the state. That the medical profession is seeing to it that they obtain excellent medical care, and that the remuneration, while not on an entirely satisfactory basis, is in the majority of instances better than it would ordinarily be from this type of patient with the accompanying type of income.

Paper work has been reduced to a minimum and it felt that if the Public Aid Commission is permitted to continue as it has for the past few years problems will be gradually diminished and while they will never be entirely eliminated, will be kept to the point where the program will be recognized as being not only definitely beneficial to the recipients but also satisfactory to the majority of the medical profession.

It is reported that efforts are being made to consolidate the Public Aid Commission with the Department of Public Welfare. Your committee feels that this would be a decided mistake because each one is a full time job for an administrator who has to be particularly qualified for this type of work. If the two are combined one service or the other will have to suffer, or it will simply be the addition of a third administrator to be in charge of the other two. This would give rise to a needless political appointee, would add to the overhead, and would probably decrease the efficiency of each department. It is to be hoped that the two state departments can be carried on separately as they are now with the resulting increase in efficiency which experience and practice have permitted each group to develop.

Respectfully submitted, E. P. COLEMAN, M.D.,
Chairman, EDWIN S. HAMILTON, M.D., B. E.

MONTGOMERY, M.D., JULIUS H. HESS, M.D., HARLAN ENGLISH, M.D., PERCY E. HOPKINS, M.D., HARRY M. HEDGE, M.D., HAROLD M. CAMP, M.D., *Ex-Officio. Advisory Committee to the Illinois Public Aid Commission.*

REPORT OF THE COMMITTEE ON MEDICAL HISTORY

Up to the present the Committee has every reason for encouragement. In our earlier efforts to establish a broad and wise basis upon which to work, naturally there were many intricate problems before us. These I feel have now largely been removed.

The early committee and Dr. Zeuch had left practically no notes, indices, references, comments, etc., that would be helpful for future publications. The principal reason for this was the early death of Dr. Zeuch; likewise, the death, or early removal from the scene of others who were active in issuing Vol. I. The present Committee therefore was obliged to again start pretty much from scratch.

Then with time and the progress of events, the problem has become far more complicated. At one of our first meetings the Committee discussed the need of Medical Libraries and by physicians of an Illinois Bibliography of medical men. Many felt this was basic in our history studies and was one of our first needs. It was practical too, since both doctors and librarians were at present spending much time in searching a poorly indexed literature for even simple data concerning Illinois physicians. It was for this and some other reasons too that we arranged to employ Miss Salmonsen, an experienced Librarian from Crerar Library, to undertake this work. It is well under way. Miss Georgia Price and Miss Elizabeth Carr, qualified librarians are assisting Miss Salmonsen. A general pattern or form of procedure has been accepted, and arranged in such a way that the many thousands of names can be completed *chronologically*. Thus, if necessary, the work may extend over a relatively long period of time. Admittedly it is a big job. But surely all our venerable members of past years deserve at least some records in available form for posterity. Most professions now have bibliographic data of the members arranged conveniently in one way or another.

In further discussions of the Committee the problem of the specialties arose. Dr. Zeuch brought up his history to approximately 1850. Before this time there were no specialties, practically speaking. So Dr. Zeuch could tell the story of earlier medicine in Illinois in a simple and quite nontechnical way. He told of the pioneer settlements in their development and growth and of the service rendered to them by the pioneer doctors. His accounts related chiefly to the lives of individual physicians classified, to a large degree, on the basis of counties and sections of the State where these men practiced. By approximately 1850, the entire State was occupied by settlers. From then on, growth was largely internal, rather than by extension outwardly into new territory. This was important historically for both civil and medical reasons.

The approximate date of 1850 was therefore an appropriate time to terminate Dr. Zeuch's Volume 1,

and to begin the historical discussion of the next period, namely, from 1850 to approximately 1900. This next period was a very different one in many ways. The 1840's have come down to us, dubbed the "roaring" forties. They were roaring because of the complexity of problems arising in a rapidly expanding society. This rapid expansion required just as rapid adjustments. The fifties roared too, culminating in 1860 in the violent Civil War, which for 5 years shook the very foundations of the entire country.

Immediately following Zeuch's Vol. I, it will be necessary to relate the medical history of that "roaring" period including the Civil War. Illinois occupied the most pivotal position of any State in the Union during the War. It became the State of Lincoln, Grant and Logan. The doctors reacted magnificently but their story has never been told adequately. Therefore, this should be one of the first objectives in preparing further chapters and volumes.

This period of 1850, or thereabouts, was crucial in other ways in medicine. The doctors became conscious of the force and power of organization as never before. In the late forties, the A. M. A. was organized, and in 1840, the Illinois State Medical Society. Innumerable smaller societies and groups were formed for educational purposes and for discussion of medical problems.

Then at about that same period a host of other problems descended upon them. These resulted largely from the great discoveries in medicine and in allied sciences which demanded not only their attention but also their education and training along highly specialized lines. Following are some of the discoveries leading to the specialties:

(a) The use of anesthetics (ether, chloroform, etc.) in the 1840's.

(b) The concept of Cellular Structure (Schleiden and Schwann).

(c) The work of Rudolph Virchow on Cellular Pathology (issued in 1859).

(d) The biological Theory of Evolution by Darwin (issued in 1859).

(e) In the early 1860's, Pasteur began his work on the bacterial causation of disease, which later culminated in the complete revolution of all our ideas on infections, inflammation, sepsis and antisepsis, etc.

(f) Emerging from the above were sanitation, pasteurization, antiseptic surgery, vaccines, serum-therapy, specific diagnosis, specific and chemical therapy, etc.

These events together with many others, placed upon the medical profession a responsibility such as it had never experienced before in history. During the half century roughly between 1850 and 1900, there arose such an array of discoveries, inventions, techniques, special and general hospitals together with an ever-expanding medical literature that the profession at times seemed bewildered. No wonder that some refused to believe in such ideas as the germ theory of causation or in all the intricacies of the cellular hypothesis.

One of the results, among many others, naturally was the rise of the specialties, as already stated. The capacity of the human mind and the problem of time

simply did not permit the individual to master the entire field. The Doctor's dilemma soon became clarified. Either he must be satisfied with a "smattering" of the total, or ignore the details of a large part of medicine and concentrate on a relatively specialized field. We all know the result. To this day some follow one course, some the other. The question is still a live one for debate.

In our discussions, the question of the importance of preserving unity has arisen several times. A thread, whatever may be its *color*, should run through the contributions from beginning to end.

There are two ways to preserve unity under the circumstances. First, each contributor should ever be on the alert to relate specific problems to more general problems and principles. Some of this relational work can and I think should be done in the body of the paper. Then, to again emphasize this unity the contributor may wish to write at the conclusion a *concise* statement concerning the many ways the specialty in question is related to general medicine through anatomy, physiology, pathology, and bacteriology. Here also may be presented the broader relations of medicine to society—for example, to government, to economics, to industry, to civic affairs, to general history, etc.

Second, a comprehensive Monograph or Volume should be prepared using both the data in the Biographical Volume and that set forth in the specialty contributions. The emphasis should be directed to the relational data and toward tying together the several fields into a comprehensive whole. The significant advances should be made to stand out in their proper perspective, whereas the lighter and more speculative matter should be properly subordinated to the more weighty material.

It is putting the cart before the horse to first decide how many volumes or chapters should be devoted to these various historical contributions. Medicine in Illinois, when it was happening, did not concern itself with the possible number of pages that some day might be necessary for an adequate history of itself. However, we must be practical and reasonable about such a matter. There are limitations that should and must be considered. But let us not alter or stunt a logical arrangement of presentation of data because of present circumstances. It would be wiser and in the end more satisfactory if we arranged our general program so that if necessary the work may be deferred for a relatively long time.

The history we have been considering in our discussions is one that will never end. That is as it should be. Whenever possible therefore, all arrangements and contributions should be elastic and subject to change. Medical History above all topics can never be static.

It may be wise at the present time not to be too explicit in shaping up subjects, volumes, monographs, chapters, etc. The entire project is in an early and developmental stage. For practical purposes only, might we suggest some such system as follows:

(1) A biographical volume—arranged from the beginning on a chronological basis to be amplified from time to time as the material comes to hand.

(2) A series of contributions, chapters, monographs, etc., covering the specialties, especially their origin from approximately 1850 to 1900. (We should not split hairs over time intervals. The rise or growth of a specialty may require a few years extension before or after 1850 or before or after 1900.)

(3) A comprehensive overall contribution knitting together the several fields of medicine including allied sciences and subjects, and analysing and emphasizing both unity and disunity during the 1850-1900 period. The length of such contribution is now problematical.

For writing the specialty contributions, the Committee has felt that only Doctors of long experience and possessing a keen interest in the history of their specialty should qualify. Therefore much time already has been devoted by the Committee to a search for such persons. Several have been selected and are now preparing their manuscripts.

It is important to assist and encourage in every possible way the historical work of all the medical groups, both county and special societies, throughout the State. Steps in this direction already have been taken, especially by promoting the study of local medical history, the assembling of data, etc., by the women's auxiliary groups.

The Chicago Medical Society (Cook County) because of its size has required certain special considerations. A committee on medical history some two years ago was appointed by this society, with Dr. J. P. Simonds as chairman. In order to correlate the work of this committee with that of the State Committee, Dr. Simonds has been made a member of the latter. At present discussions are proceeding in this basis. Overlapping and unnecessary repetitions thus may be avoided and certain economies effected.

Respectfully submitted, JAMES H. HUTTON, M. D., *Chairman*, J. J. MOORE, M. D., CHARLES P. BLAIR, M. D., D. D. MONROE, M. D., E. H. WELD, M. D., H. M. CAMP, M. D., GEORGE COLEMAN, M. D., J. P. SIMONDS, M. D., DAVID J. DAVIS, M. D., *Permanent Historian*, (Submitting report for the Chairman.) *Committee on Medical History*.

REPORT OF THE COMMITTEE ON MILITARY AFFAIRS AND EMERGENCY MEDICAL SERVICE

Three meetings were held by this Committee during the past year. The major attention of your Committee has been devoted to the large and involved problem of providing medical service to the large number of casualties which may result from natural disasters or by reason of enemy use of atomic bombs, guided missiles or biological warfare.

Your Committee has worked closely with the Council on National Emergency Medical Service of the American Medical Association. Plans developed by other States and by large metropolitan areas have been studied regarding their applicability to the situation in Illinois. It is realized that the extent of emergency medical services cannot be contained within State boundaries. Liaison action and planning is contemplated with neighboring States.

Because of the plans developed in the Philadelphia area, the Chairman traveled to Philadelphia in February for a first-hand study of the manner of organization.

County chairmen of civil medical defense service have been appointed for each county in Illinois. These physicians were chosen by their county medical societies for this important task. They are all veterans of World War II and most saw overseas service, many in combat areas. Only a few hold reserve commissions. These county chairmen will be the key men in the medical care of casualties resulting from natural disasters or enemy action localized in their respective counties and in adjacent areas. They will head a local organization of general practitioners and specialists which must be self-sufficient not only in personnel but in supplies, facilities and planning as well. The "grass roots" theme must prevail in this regard. County units will be brought together into twelve district units, grouped according to the twelve centers of population with the State. Liaison will be established with other professional groups and other organizations peculiarly fitted to assist in this immense undertaking.

No official pattern for organization has yet been offered by national authority. However, the Office of Civilian Defense Planning has compiled "Civil Defense for National Security" and did submit this report, commonly referred to as the "Hopley Report," to Mr. Forrestal, Secretary of Defense, on October 1, 1948. This report submits a National, Regional, State and Community plan for civil defense for national security. This was promptly released by Mr. Forrestal to serve as a guide for future action by interested groups. This plan has been studied by your Committee and has been found to be largely applicable to the medical casualty problems in Illinois.

Several conferences have been held with the Officers of the Illinois National Guard whose functions affect casualty relief. A communication has been sent to Governor Stevenson by the Illinois State Medical Society advising of the degree of organization of the medical profession in Illinois and recommending the appointment of an Illinois War-Disaster Commission which would direct further correlated action by all professions and public agencies concerned.

Continuing study is being made as to the advisability and feasibility of the "walking blood bank" principle to insure adequate blood for the treatment of the immense number of casualties which may develop.

Drafting of doctors for service in the medical departments of the Armed Forces appears near at hand, (see April 1949 issue, *Illinois Medical Journal*). On February 25, 1948, Secretary of Defense Forrestal stated that the armed forces face a very serious shortage of medical officers. Many medical officers now on duty with the armed forces received their medical education at government expense during the war years in the A. S. T. P. and V-12 programs while in uniform and are now completing their required two years of service. Replacements must be secured promptly or it will become necessary to ask Congress for a "doctor draft." Mr. Forrestal has appealed to the 15,000 young physicians of all ages who received their education through

A. S. T. P. and V-12 programs and who saw no military service, to volunteer for service as medical officers to replace the 2,100 doctors now on active duty whose release during the next few months is contemplated. Approximately 500 physicians have replied to the communications from Mr. Forrestal and the A. M. A. requesting commissions. This falls far short of the number of replacements needed. There are 459 physicians under twenty-six years of age residing in Illinois who are considered "available." They all have been contacted by Secretary Forrestal and the A. M. A. Twenty-six of those who replied indicated their desire to seek commissions; 391 presently reside in Cook County while 42 are located downstate. Realizing that the Medical Procurement Program has not accomplished its abjective, namely, adequate medical manpower, this Committee is now formulating plans for personal interviews with each of the physicians whom it is believed are morally obligated to serve in the medical departments of the Armed Forces.

Your Committee attended the semiannual meeting of the Council on National Emergency Medical Service of the A. M. A. at the headquarters of the A. M. A., Chicago, March 21, 1949, and heard of the program in Civil Defense Planning, the Medical Activities of the National Securities Resources Board, the Medical Activities of the Armed Forces Medical Advisory Committee and a panel discussion of the Medical Officer Procurement Program. Out of the meeting came the conclusion that from three to five years would be required to complete an organization for civil defense.

The Committee has made every effort to cooperate with national and local groups in expediting and coordinating ideas, programs and actual design.

It has made every sincere effort to carry through the aims and ideals of this House of Delegates in cooperating with the designated national authorities. While a complete pattern has not been established, the Committee has endeavored to do what it could with the existing information available through official channels. It expresses its appreciation for the confidence of this executive House of Delegates and wishes advice and counsel for its future activities.

The Committee realizes the vast importance and implications should a national draft of physicians be enforced and urges every member of the Illinois State Medical Society to harbor a similar awareness.

Respectfully submitted, EARL H. BLAIR, M.D., *Chairman*, F. T. BRENNER, M.D., PLINY R. BLODGETT, M.D., PHILIP LEWIN, M.D., GILBERT EDWARDS, M.D., KENNETH H. SCHNEPP, M.D., LEO P. A. SWEENEY, M.D., *Committee on Military Affairs and Emergency Medical Service*.

REPORT OF ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY

The following report is presented regarding the activities of our Woman's Auxiliary.

Again this Committee desires to emphasize the debt of appreciation we believe the Society owes them for their valuable work in supporting Organized Medicine.

During the past fiscal year the President, Mrs. L. N. Hamm, of Lincoln, has demonstrated her able executive ability and leadership which, with the willing cooperation of her officers, has secured worth while results in the various objective endeavors outlined by them at the beginning of the year, together with some others subsequently suggested by this committee.

Only a few of the more important are cited herein as follows:

Public Relations meetings have been held by many Auxiliary groups throughout the State with lay audiences, such as Women's Clubs, P. T. A., and other assemblies, at which Government Controlled Medicine has been discussed. These audiences, including members of the Auxiliary, have been requested to write their Congressmen opposing this Health Bill.

Organization has received energetic attention and, as a result, several new County Groups have been installed.

The Benevolence Fund has received liberal contributions.

Searching for historical data to complete "The History of Medical Practice in Illinois" has received special attention.

Subscription sales of *Hygeia* has favorably progressed.

Much more could be written concerning the activities of the Woman's Auxiliary. Suffice to state, your Committee concurs in the opinion that they constitute an important adjunct of the Society, and are deserving of our support and hearty commendation.

Respectfully submitted, DARWIN B. POND, M.D., *Chairman*, H. KENNETH SCATLIFF, M.D., E. G. BEATTY, M.D., HAROLD M. CAMP, M.D., *Advisory Committee to the Woman's Auxiliary*.

REPORT OF THE COMMITTEE ON TUBERCULOSIS

There has been a great deal of healthy and helpful activity the past year on the part of the various tuberculosis control organizations throughout the state and never before has there been as fine accord and cooperation. All workers seem determined to find a sure and rapid method to finally eliminate tuberculosis morbidity and mortality among the citizens of Illinois. To enumerate all the boards, committees and associations joined in this work would take up too much space, but it does comprise practically every one from the State Department of Public Health to the smaller County Health Department and Tuberculosis Association, all of them working with the family physician, county medical societies and the State Medical Society.

The family physician is still the keystone of the arch of tuberculosis control and the reporting of all cases, which must precede all other anti-tuberculosis campaigns, is still the most pressing problem from our standpoint. The physician can be the contact ring around the patient as the center making contact with those bodies devoted to tuberculosis control, or he can be the insulating ring, to the detriment of the patient and the public.

If every family physician would familiarize himself with the Mantoux Test and would perform it on every

patient that enters his office or do a chest x-ray on all adults and then report his cases promptly we would see a remarkable change in the picture over the state.

Hospital admission x-rays on all patients has come to the fore as a means of finding hidden cases. 6,000,000 people enter the public hospitals of this country yearly and a great percentage of these are elderly people who have not had a tuberculosis diagnosis.

Tuberculosis in those of middle and elderly age is harder to find than in younger years but is just as great a menace. These people usually are not covered in industrial surveys, school surveys, food handlers, etc. and offer a prolific field for finding tuberculosis that would not otherwise be uncovered. In several of the larger cities of Illinois this program is carried out with the cooperation of the hospitals, county medical societies and local tuberculosis associations. A chest picture on every patient admitted to Illinois general hospitals should be our aim.

Considerable legislation will be introduced in the 66th General Assembly to carry out a program to provide needed hospital beds and funds to take care of programs of control but how the various plans will come out at the end of the session depends on the energy with which this legislation is pushed by those interested. Every member of the Illinois State Medical Society should keep informed on their progress and make contact with his State Senator and Representatives and express his views on the matter.

The Committee for Eradication of Tuberculosis of which Dr. James H. Hutton and Mrs. Laura Hughes Lundie are co-chairmen and whose membership comprises many organizations, such as Illinois State Medical Society, Chicago Medical Society, Tuberculosis Institute of Chicago and Cook County, Illinois Tuberculosis Association, Illinois Congress of Parents and Teachers, Illinois Federation of Womens Clubs, State Department of Public Health, Cook County Health Department, Chicago Municipal Tuberculosis Sanatorium and others has evolved a program to present to the Legislature under three headings:

(1) Build three additional 250 bed State tuberculosis hospitals—two in Chicago and one downstate (a new 100 bed State Sanatorium is now under construction at Mt. Vernon).

(2) Appropriate \$3,000,000 to the Illinois Department of Public Health. This fund is to be used to assist local sanatorium boards to care for cases if their tax has been completely levied but funds raised still are not sufficient to carry out their tuberculosis control program.

(3) Transfer to the Illinois Department of Public Health \$875,000 which was allocated in 1947 to build a sanatorium in Savanna, Illinois, in the northwest part of the state. This sanatorium was not built and the appropriation lapsed. This fund would be used to assist local sanatoria to enlarge or modernize existing facilities, with the understanding that they would accept out-of-the-county patients whenever beds are available.

The budget of the State Department of Public Health has considered and included these three plans.

In addition the Governor's Budgetary Commission has approved the inclusion for grants-in-aid to tuberculosis sanatorium boards on the basis of need. This would be sufficient to give necessary aid to down-state sanatorium programs but would not be sufficient to give much aid to Chicago or provide any tax relief to down-state localities.

The State Department of Public Health has recommended the following proposed appropriations for the Extraordinary Budget for the 66th General Assembly.

1. Mt. Vernon State Tuberculosis Sanatorium	
Completion of construction	\$ 725,000
Furnishing and equipment	225,000
Operation for 6 months	224,155
2. Chicago State Tuberculosis Sanatorium	
Completion of construction	280,339
Furnishing and equipment	405,250
Operation for 6 months	771,110
3. Institute for Tuberculosis Research	
Completion of construction	261,000
Furnishing and equipment	100,000
4. Hospital Construction, renewal	5,750,000
5. Permanent Improvements in State Laboratory	
Building at Chicago	155,000
6. For grants to county tuberculosis hospitals for alterations and expansion of buildings.	1,000,000
7. Construction, new wing State Laboratory	
Building in Chicago	1,500,000
8. State Public Health Building in Springfield to house the Department of Public Health	4,542,000
9. Construction new tuberculosis hospitals	
2 of 250 beds each in Chicago	7,500,000
Land for same	300,000
1 of 200 beds downstate	3,000,000
Land for same	50,000
Total	\$26,789,574

REAPPROPRIATIONS:

1. Hospital Construction Projects	\$3,100,000
2. State Tuberculosis hospitals	
Chicago	4,850,000
Mt. Vernon	800,000
Total	\$8,750,000

(The 65th General Assembly appropriated \$4,675,000, \$5,000,000 and \$850,000 for these three items respectively. Although these funds have been obligated, construction will have progressed far enough by September 30, 1949, to justify payment of contracts and commitments.)

Item No. 6, \$1,000,000 "For grants to county tuberculosis hospitals for alterations and expansion of building," is of primary importance at this time. Several of the larger sanatoria downstate are currently utilizing their maximum budgets for the care and treatment of patients with the result that necessary repairs and alterations are postponed. These institutions, if granted financial assistance, could add much needed beds at a minimum cost.

Item No. 9 includes provision for building a new 200-bed tuberculosis hospital downstate. This would be in addition to the new 100-bed sanatorium under construction at Mt. Vernon. According to the re-

cent hospital survey conducted by the State Health Department, the area south of an imaginary line drawn from Quincy-Springfield-Danville has at the present time 256 hospital beds for the tuberculous. To satisfy minimum standards a total of 802 beds should be available in this area or a 546 bed deficiency. With construction of 300 new beds, we will have a deficiency of 246 beds for southern Illinois. It is vitally important that new beds to hospitalize active cases are constructed, if we are to eradicate tuberculosis. Local tax funds cannot begin to do the job—state funds must be made available. The 66th General Assembly can do much to help eradicate tuberculosis, a communicable disease which killed 7,772 persons in Illinois in 1947.

Your committee recommends that the Illinois State Medical Society endorse these legislative programs, as outlined above and asks its members to use their influence in their local communities to create sentiment favorable to the passage of such an appropriation program in the State.

Respectfully submitted, FRED M. MEIXNER, M.D., *Chairman*. FRANK J. SMEJKAL, M.D., ROBERT K. CAMPBELL, M.D., O. L. BETTAG, M.D., *Committee on Tuberculosis*.

REPORT OF THE COMMITTEE ON CANCER CONTROL

The program in the State of Illinois inhibiting the ravages of Cancer is augmented greatly by the activities of Dr. John A. Rogers, Executive Director, Illinois Division, American Cancer Society, and Dr. G. Howard Gowen, Chief of the Division of Cancer Control, Department of Public Health. In fact, most of the activities center about these two organizations, which we are happy to report work with complete coordination. Much, in fact most of the data included in this report represents data submitted by Dr. Rogers and Dr. Gowen.

"The Illinois Division of the American Cancer Society, Inc., has continued to expand during the past year. Twenty new organized chapters have been added so that there are now a total of seventy scattered throughout the state, and much progress has been made in organizing the metropolitan Chicago area. Several chapters have been organized within the city, based somewhat on the branches of the Chicago Medical Society. They follow natural geographical divisions within the city, such as West Suburban, which includes Oak Park and River Forest; North Side, which includes Evanston and the towns north. These chapters are identical in organization with the various county units. The basic organization of the Society has remained the same.

Mr. Edward Foss Wilson, president of the Wilson Packing Company, is president of the Division. Mr. Bertram J. Cahn, president of Kuppenheimer, is chairman of the Board of Directors. Mr. Gerald Sivage, assistant to the president of Marshall Field & Company, is Chairman of the Executive Committee. Dr. George E. Wakerlin has continued as chairman of the Medical and Scientific Committee.

The campaign for funds last year amounted to \$785,218.00. This represented a considerable increase over the year before. In accordance with national policy, 40 per cent of this sum, or \$314,086.00 was sent to the national organization. It is interesting to note that the national society returned to Illinois institutions \$183,867.00 in grants-in-aid to individual cancer research men, \$330,000.00 in institutional grants and \$16,046.00 for fellowships, or a total of \$529,913.00. The prospects for the annual campaign for funds in April, 1949 are bright since the organization required for a financial undertaking of this magnitude has been greatly improved.

The program of professional education has been continued. A five day course was held during January, 1949 and our seventh cancer refresher course will be given during the first week of April. This program is conducted at Northwestern University School of Medicine (Mercy Hospital), the University of Chicago School of Medicine and Michael Reese Hospital. Great credit is due to the faculty and staffs of these institutions for their cooperation in providing such excellent instruction on such important matter as the early diagnosis and treatment of cancer. One-day cancer symposia will be held in several districts of the State Society.

During October 1948 a program of instruction on oral cancer was given for members of the dental profession. The central program was held at the University of Illinois College of Dentistry on six Wednesday evenings, from seven to nine P. M. The attendance at each of these programs was about two hundred and the course was broadcast by long distance telephone to dental societies in five of the major cities of Illinois.

The program of public education has continued at an increased tempo. This program is based on the paradoxical character of cancer, namely the inevitably fatal termination unless eradicated but a disease which has a high rate of curability in the early stage and that has an insidious painless onset which fails to alarm the victim. Hundreds of thousands of pieces of literature have been distributed, cancer exhibits were conducted at fifteen county fairs, educational films have been shown nearly two thousand times and many groups in industry and labor groups have been provided with speakers. Personal contact with the principals of 964 public high schools has resulted in the cooperation of the faculty in including the study of cancer in the curriculum.

The Illinois Division now operates eighteen cancer information centers where counseling service is provided to individuals seeking help about a personal or family cancer problem. No medical advice is given and the aim is to urge persons applying to seek competent medical advice.

There are nine loan closets scattered throughout the state which provide patients with essential sick room articles which even include hospital beds. There are 152 groups of volunteer workers who have made and distributed 84,000 cancer dressings to cancer victims.

A transportation corps of volunteers has been organized for the purpose of transporting cancer patients from their homes to Cook County Hospital for necessary treatments and return to their homes. These patients are carefully selected by the authorities at Cook County Hospital and are those who would or could not come by ordinary transportation. Two thousand such trips have been made by the transportation corps. These women have now raised sufficient money to present a new station wagon to the Illinois Division which will be used for this purpose. Another station wagon is in the offing, it being planned to use one for South Side and one for North Side areas.

The Illinois Division has provided grants for additional nursing service to cancer patients in Chicago, Rockford, Peoria, Elgin, Aurora, Alton and Decatur.

We have continued to support cancer detection centers located at the Women's and Children's, Henry, Grant and Mercy Hospitals. It is expected that some six thousand apparently well persons will be examined in these centers during the period of a year. If pathology is found, a report is forwarded to the family physician. The examination is very thorough and complete.

A special committee of the Division, of which Danely P. Slaughter was chairman, developed a plan for a practical examination for the detection of cancer which may be given in any physician's office. This plan is not perfect but it is estimated that such an examination will detect from 60 to 70 per cent of accessible cancer. Approval of the plan has been given by the Cancer Committee and the Council of the State Society. The proposal has been sent to the presidents and secretaries of all county medical societies in the state. It is hoped that a county medical society will adopt a uniform examination for a uniform fee. The effect of such a simplified plan on medical public relations is incalculable and should go a long way in supplying the public demand for such an examination.

The Illinois Division has continued to assist several diagnostic clinics in Chicago and downstate. Fellowships in training in clinical cancer have been provided at the University of Illinois, totaling \$6,600.00.

A cancer exhibit for installation at the Museum of Science and Industry has been under preparation at the Illustration Studios of the University of Illinois for a period of almost two years. Plans have now reached a definitive stage, construction has been started and it is expected that the exhibit will be opened to the public during the latter part of April. This is an ambitious exhibit designed again to carry the cancer story to the public and will be seen by hundreds of thousands of people each year."

Under the guidance of Dr. G. Howard Gowen, Chief, Division of Cancer Control, the State Department of Public Health, their program has increased in scope particularly in the establishment of cancer diagnostic clinics downstate and in the preparation of small pamphlets for distribution to lay people.

"1. The number of State-aided cancer diagnostic clinics has been increased from 19 to 20. The new clinic is located at the Evanston Hospital, Evanston, Illinois.

The establishment of State-aided cancer diagnostic clinics has been approved by the County Medical Societies in Mercer County, Will-Grundy County and the Jefferson-Hamilton County.

The clinics at St. Joseph's Hospital, Joliet; Good Samaritan Hospital, Mt. Vernon are in the process of being established. The clinic at Aledo will be established as soon as the hospital is completed which will be some time after July 1, 1949.

2. We have continued our program of improving the diagnostic facilities at each clinic by attempting to supply as rapidly as possible certain types of modern equipment.

3. We have continued our policy of sending medical health officers to the cancer refresher courses in Chicago. Three health officers attended the January course and five were scheduled to attend the April course but unfortunately the dates conflicted with the annual meeting of the Illinois Public Health Association.

4. Four nurses were sent to the Institute on Cancer which is being held at the St. Louis University—March 7 to 25, 1949.

5. We have continued the policy of encouraging the cancer diagnostic clinics to invite in special teaching consultants at intervals and we, of course, pay the honoraria and expenses.

6. We prepared and distributed 4,400 sets (15 posters each) of cancer posters in downstate Illinois. This would make a total of 66,000 posters. These were presented in industries, high schools, local business concerns, railroad stations, libraries, county buildings, home bureaus, farm bureaus and so forth.

We are now in the process of compiling some information received by us from industries using our posters as to their apparent effectiveness. We can say at this time that they met with almost unanimous approval and in practically every instance it was indicated that if we ever prepared a new series, they would be more than welcome.

7. During the year we prepared four new lay-educational pamphlets entitled "Cancer of the Breast," "Cancer of the Uterus," "The ABC of Cancer," and "Cancer the Killer." The first three listed are two-page fliers. The one entitled "Cancer the Killer" is an eight-page pictorial story of cancer in color.

8. We have just begun a program of paid newspaper articles. These are prepared in a simple brief form each one taking up one of the important signs or symptoms of cancer. The same article is presented in all of the downstate newspapers at the same time. We are attempting to determine which is more effective, the daily newspaper or the weekly newspaper. Once we have made up our minds in this regard, we will limit these releases to one or the other. There are 600 daily and weekly newspapers outside of Chicago, in Illinois.

9. We have completed a survey of downstate Illinois deep x-ray therapy facilities. This is now in the hands of the Illinois Society of Radiologists. As soon as that

group decides how it wishes the facts found presented, we will write them up for publication.

10. We have completed a study of the value of TB chest surveys as a medium for the early diagnosis of neoplasms of the chest. This report is being written up and will be ready in the near future.

11. We have finally, in cooperation with our Division of Vital Statistics, been able to begin punching, tabulation and analysis of reports received by us from the various State-aided cancer diagnostic clinics. This information will be completed as soon as possible for publication.

12. In cooperation with our Division of Public Health Dentistry, we have attempted to bring the dentist more intimately into the field of cancer diagnosis as related to the oral cavity and the area immediately around the oral cavity. This has been done through the medium of letters, pamphlets and similar agencies. We purchased 500 copies of the cancer manual for dentists prepared by the Connecticut Dental Society. This is undoubtedly the best publication of this sort in the country. The dentists were notified that the publication was available and that copies would be sent upon request.

13. We have continued our program of attempting to supply the deficit created when the Illinois Cancer Bulletin ceased to be published. During the past 12 months we have sent seven articles on the subject of cancer to all downstate physicians.

14. During the past year, we sent three of the pathologists from our cancer diagnostic clinics to take the course in exfoliative cytology given by Dr. George Papanicolaou of Cornell University.

15. During 1948, the American College of Surgeons made an inspection of all of the State-aided cancer diagnostic clinics and either approved or tentatively approved 16 of the 19 then in existence. We mention this because it brings out the fact that in promoting and supporting these clinics we make every effort to bring them to the ultimate goal of approval by the American College of Surgeons. By the end of 1949 our ratio of approval will be considerably higher."

The Committee on Cancer Control of the Illinois State Medical Society has been giving thought to methods of disseminating information to physicians; the possibilities of production of a movie were discussed, but abandoned because many movies have already been produced in this field, or are in preparation. The Committee thought that preparation of a manual on Cancer by the State of Illinois would be desirable at least for serious consideration. The manual published by the Cancer Committee of the Iowa State Medical Society is quite good but we do see ways in which improvement could be made. Illustrations might be added. However, this would be a costly venture and the Council of the Illinois State Medical Society is of the opinion that studies should be made of this project, obtaining information regarding subsidy and a report be made several months later after the urgency of the fight against Socialized Medicine has become less acute.

Respectfully submitted, WARREN H. COLE, M.D., *Chairman*. H. E. DAVIS, M.D., ROSWELL T. PETTIT, M.D., E. F. HIRSH, M.D., T. C. GALLOWAY,

M.D., CHARLES L. LEONARD, M.D., *Committee on Cancer Control.*

REPORT OF THE COMMITTEE ON NUTRITION

Your Committee has had no meetings.* We have contacted the Program Committee for the Annual Meeting to have an outstanding speaker on this subject, but to no avail. For what reason, we do not know. The way most of those on that committee complain about their food, one would think they would be more interested.

Respectfully submitted, G. C. OTRICH, M.D., *Chairman.* HARLAN ENGLISH, M.D., E. P. COLEMAN, M.D., JOHN P. O'NEIL, M.D., L. J. HUGHES, M.D., *Committee on Nutrition.*

REPORT OF THE COMMITTEE ON RURAL MEDICAL SERVICE

During the past year the Committee on Rural Medical Service has been quite active in the promotion of a variety of mechanisms by which we feel the Society can improve its rural public health relations, as well as its rural medical service to the individual rural citizen. We started the year out by implementing the Farmer and Doctor Loan Fund, and loaned money to three students at the University of Illinois, one from Clay County, one from Hancock County, and one from Washington County, plus one student at Loyola University from Pulaski County. There are several applications for student loans for the October 1949 medical year. Considerable nationwide publicity attended our initiation of the Farmer and Doctor Loan Fund Board. The State Society was pointed to by many other State Societies and groups as assisting in the solution of a difficult problem by this mechanism.

During the winter the committee on Rural Medical Service put on two Rural Health Conferences in Illinois, one in Mt. Vernon and one in Peoria on successive days. The following programs were discussed: "Opportunities in Medicine and Related Fields," "Tuberculosis, What It Costs, and What Can Be Done About It," "The Hospital Construction Act, What It Means to Your County," "The Issue of Compulsory Health Insurance." These four panels were discussed at the Mt. Vernon meeting, and at the Peoria rural conference, two further panels were added; one on "County Health Departments, What They Cost and What They Can Do," and the second, "Cancer, What Can Be Done with It." The assistance of many men in Illinois Medicine insured the success of these two conferences and the 350 chosen rural citizens who attended were pleased with the presentation, and suggested we have this type of thing more often.

At the time this report is being written, your committee is planning a dinner meeting with 50 internes and 25 residents from the rural areas of Illinois, to be held in Chicago the latter part of April, at which time available location in Illinois will be shown to these men; plus a panel discussion on "How to Conduct a Practice," "What Equipment to Buy," "How to Select and Employ Assistants," and "How to Manage One's Finances."

Only the future will tell how successful this venture is, but it has the endorsement of the leading medical educators of Chicago, and we are hopeful as a committee that it will assist in the solution of letting available personnel know the current areas of need within the State.

During the past year about 9 new health improvement associations have been formed in 9 different counties in the State of Illinois, to distribute the cost of hospital care as widely as possible over the rural population. These have been rather enthusiastically received by the counties in which they have been started and represent to our way of thinking, a step in the right direction. The potentialities of the Committee on Rural Medical Service are rather enormous and we are making an effort to implement any good, sensible ideas that any member of the Society has to offer.

Respectfully submitted, HARLAN ENGLISH, M.D., *Chairman.* G. C. OTRICH, M.D., W. I. LEWIS, M.D., EDGAR C. COOK, M.D., J. C. REDINGTON, M.D., *Committee on Rural Medical Service.*

REPORT OF THE COMMITTEE ON ETHICAL RELATIONS

Again it is the pleasure of this Committee to report to the House of Delegates that no formal complaints have been referred to it for investigation to be reported back to the Council. It is extremely gratifying to note that in so serious a time when the future of the Medical Profession at times seems a little clouded, that apparently physicians are working more cooperatively than ever before.

It is the opinion of the Committee, two of whom have been members for several years, that most of the differences that arise between Doctors can be settled on a local level at their County Society.

Of course, every year many questions arise which are referred to the Committee but even these have been less in the past few years.

Respectfully submitted, E. S. HAMILTON, M.D., *Chairman.* C. H. PHIFER, M.D., G. E. JOHNSON, M.D., *Committee on Ethical Relations.*

REPORT OF THE COMMITTEE ON CONSTITUTION AND BY-LAWS

The Constitution and By-Laws Committee has not had any direct referral of business since the last Annual Session of the House of Delegates.

Two matters of importance have however been suggested for consideration:

(1) The new Constitution and By-Laws of the American Medical Association has been completed and adopted and there may be some conflicts with our State Constitution. Since the last general revision of our Constitution was done in 1941, it is suggested that study be made in the coming year to revise and streamline, if possible, the present Constitution and to bring it in line with that of the A. M. A.

(2) Chicago Medical Society has sponsored the early entrance of young physicians in organized medicine, one of these efforts has been directed toward residents in training. Section 4, Article IV of our Constitution works an undue hardship on the young man and on the

County Society in that it provides for dues at a special rate of half of the per capita amount fixed by the House of Delegates, which for the current year amounts to \$7.50. It is suggested that the present Section 4 of Article IV be deleted and that the following be adopted in its stead:

Section 4—"After being duly licensed to practice medicine in the State of Illinois a physician serving full time as a certified resident in a hospital or medical institution in the State of Illinois approved for graduate training for a medical specialty by the Council on Medical Education and Hospitals of the American Medical Association may enjoy all of the privileges of full membership at a special rate of \$5.00 per annum as long as he serves as a resident; thereafter the full rate shall apply."

Resident members must fulfill the qualifications of Section 2 of Article IV.

Respectfully submitted, WARREN W. FUREY, M.D., *Chairman*. H. NOLAND FISHER, M.D., PLINY R. BLODGETT, M.D., *Committee on Constitution and By-Laws*.

REPORT OF THE ADVISORY COMMITTEE TO THE VETERANS ADMINISTRATION

A new annual contract, embodying a new fee table, to be in force for one year, was signed July 1, 1948, between the Veterans' Administration and the Illinois State Medical Society. The fee table includes several changes from the table previously used, but we believe that, in general, the sums received under the new contract will average at about the same level.

There has been some complaint, principally because of misunderstanding of the new fees, but copies of the new contract and fee table have been sent to all county medical societies and it is hoped that this will eliminate the misunderstanding.

For the year 1948 the Veterans' Administration supplies the following details of operations under this plan:

Pension examinations	26,941
Paid to Physicians	\$242,286.71
Average per patient	\$9.00
Treatments	24,929
Paid to Physicians	119,863.77

The Veterans' Administration has expressed the opinion that relationships with and service rendered by the physicians of the Illinois State Medical Society have been very satisfactory and much appreciated and hopes that this relationship will continue.

Dr. B. F. Cockrell, chief medical officer of this region and his staff have been entirely cooperative in the joint effort to make this program function and the committee feels, that, whatever may be the shortcomings of this program, Dr. Cockrell's work warrants our appreciation.

PERCY E. HOPKINS, M.D., *Chairman*. F. LEE STONE, M.D., *Vice-Chairman*. WALTER STEVENSON, M.D., HAROLD M. CAMP, M.D., *Advisory Committee to Veterans' Administration*.

REPORT OF THE COMMITTEE ON CRIPPLED CHILDREN'S CLINICS

Crippled Children's Clinics in Illinois, both in Cook County and throughout the State are well organized.

Those throughout the State are conducted by several agencies. The principal ones are:

1. The Illinois Elks Association Crippled Children's Committee;
2. Division of Services for Crippled Children, University of Illinois, under the supervision of Dr. Herbert R. Kobes;
3. A number of independent Crippled Children's Clinics sponsored by individual County Medical Societies.

THE ELKS ASSOCIATION:

Clinics held—1948	150
Total examinations	2,371
Number of cases hospitalized.....	175
Number of hospitals used	9

DIVISION FOR CRIPPLED CHILDREN, University of Illinois, under the supervision of Dr. Kobes included the following:

<i>County</i>	<i>Site of Clinic</i>	<i>No. of Clinics</i>	<i>Total Visits</i>
Adams	Quincy	3	185
Alexander	Cairo	4	216
Clark	Casey	2	86
Clay	Flora	1	42
Cook	Chicago Heights	6	234
	Evergreen Park	4	141
	Glenview	3	98
	Clinton	2	82
DeWitt	Hinsdale	12	631
DuPage	Effingham	1	53
Effingham	Vandalia	1	38
Fayette	Shawneetown	1	52
Gallatin	Carrollton	2	77
Greene	Watseka	3	80
Iroquois	Mt. Vernon	2	114
Jefferson	Aurora	2	56
Kane	Elgin	2	59
McDonough	Macomb	3	172
McLean	Normal	6	208
Madison	Alton	3	183
Marion	Centralia	2	93
	Salem	2	110
	Metropolis	1	31
Massac	Litchfield	2	109
Montgomery	Jacksonville	2	100
Morgan	Peoria	24	1516
Peoria	DuQuoin	2	88
Perry	Pittsfield	2	88
Pike	Golconda	1	31
Pope	East St. Louis	12	782
St. Clair	Shelbyville	2	99
Shelby			

Union	Anna	1	41
Vermilion	Danville	4	189
Wayne	Fairfield	1	46
Whiteside	Sterling	6	312
Will	Joliet	6	171
Winnebago	Rockford	12	544
		—	—
Totals		145	7157

The above are General Clinics at which diagnostic orthopedic, pediatric, speech and hearing examinations are provided.

Crippled Children's Clinics held in Chicago and Cook County.

CHICAGO GROUP. Medical Schools and Hospitals.
University of Illinois. Out patient Orthopedic Department:

Clinics held per week 10.
9593 patients treated during the past year. Of this number the majority were children.

Loyola Medical School. Clinics given at Mercy Hospital Dispensary.

One clinic per week for crippled children.
Two clinics per month for spastic cases.

Northwestern Medical School. Montgomery-Ward Clinics held, 4 per week for children.

Chicago Medical School. In connection with Mt. Sinai Hospital.

Clinics held, 4 per week.
The number of crippled children treated is not available.

University of Chicago. This is a pay clinic. Statistics not available.

St. Luke's Hospital.
Clinics held, 4 per week.
Approximate number of patients per week, 38.
Clinical visits 1011.

Michael Reese Hospital. Mandel Clinic.
Clinics held, 1 per week.
Patients treated 256. 806 clinical visits.

Presbyterian Hospital. Central Free Dispensary.
Clinics held, 3 per week. Average patients per clinic 36. Clinical visits 183.

Provident Hospital.
Clinics held, 12 per month. An average of 50 patients are treated at each clinic.

Shriners Hospital.
Clinics held, 2 per week.
Approximately 200 patients are treated per month.

Children's Memorial Hospital.
Clinics held, 4 per month.
500 patients treated during 1948.

Cook County Hospital.
Clinics held, 6 per week.
1257 patients treated during year 1948.

Cook County Department of Public Health.
This department under Physical Therapy Treatment headings conduct several Physical Therapy Treatment Clinics in Cook County outside of Chicago. They are as follows:

1. Berwyn, Illinois, 1 clinic per week.
2. Des Plaines, Illinois, 1 clinic per week.

3. Harvey, Illinois, 1 clinic per week.
 4. Chicago Heights, Illinois, 1 clinic per week.
 5. Maywood, Illinois, 1 clinic per week.
 6. Evergreen Park, Illinois, 1 clinic per week.
- 1061 patients were treated during the year 1948 and 1265 home visits were made.

Conclusions.
In the City of Chicago the number of crippled children's clinics and their hospitalization facilities are adequate to give proper treatment to the present number of crippled children, both in the acute and chronic stages.

Downstate clinics are held on a average of three or four times a year in most of the centers. Throughout the State of Illinois clinics are held in most of the counties. The locations of these are such that almost all of the crippled children can be brought to the clinics regularly.

Respectfully submitted, FRANK G. MURPHY, M.D., *Chairman*, HERBERT R. KOBES, M.D., GERARD N. KROST, M.D., RALPH G. PEAIRS, M.D., CHARLES PAPIK, M.D., *Committee on Crippled Children's Clinics.*

REPORT OF THE COMMITTEE ON VENEREAL DISEASE CONTROL

The Division of Venereal Disease Control, under the able direction of its Chief, Leonard M. Schunman, M.D., has been very cooperative with the committee during the past year. The major emphasis has been on professional education through the policy of post-graduate education in venereal disease for clinic directors and health officers. The Division was able to send six technicians and three health officers to the postgraduate course in Hot Springs Medical Center. The past year too saw the initiation of a professional bulletin of technical information for private physicians known as the Physician's Bulletin of Venereal Disease Control. This is meeting with great success. The Division has similarly prepared an informational bulletin analyzing trends and activities of the various health jurisdictions of the state in the field of venereal disease control.

The Selective Service case finding techniques which proved so successful in World War II were instituted as a divisional activity with the re-activation of Selective Service. On the medical aspect the Division is maintaining its awareness of newly approved and recommended schedules of therapy and is making an attempt to keep the practicing physician abreast with this newer knowledge of therapy; also to assist private physicians in following their patients serologically by quantitative tests. The Division of Laboratories were also able to institute routine quantitative Kahn testing irrespective of the request of the private physician. This has proved to be a very effective check on the results of the therapy, in the treatment of venereal disease. An intensive venereal disease case-finding program is in the making for this year. The objective of the program is to acquaint the public with symptoms of early Syphilis, the danger of untreated Syphilis, the ease, speed and effectiveness of treatment and the availability of diagnostic and treatment services in order to en-

TABLE 1—REPORTING OF VENEREAL DISEASES BY ALL SOURCES AND BY PRIVATE PHYSICIANS
ILLINOIS — CALENDAR YEARS — 1947-1948

DISEASE AND STAGE	NUMBER OF CASES REPORTED			
	TOTAL CASES		PRIVATE PHYSICIANS	
	1947	1948	1947	1948
SYPHILIS	19,360	17,006	8,622	8,461
Primary and Secondary ..	5,195	3,844	1,768	1,655
Early Latent	5,863	5,108	2,200	2,047
Late and Late Latent	7,753	7,553	4,466	4,547
Congenital	549	501	188	212
GONORRHEA	36,794	28,664	5,947	5,568
CHANCROID	421	343	30	21
LYMPHOGRANULOMA	421			
VENEREUM	226	187	3	6
GRANULOMA INGUIN-				
ALE	57	54	5	5

courage persons who now constitute the undiscovered source of infection to seek early treatment.

Attention is called to the two tables, *one dealing with morbidity reporting for the calendar year 1948 as compared with the corresponding period of 1947*, as well as a table on rapid treatment facility admissions of downstate Illinois patients for the calendar year 1948 as compared to the preceding year.

It will be noted from Table I that there has been a decrease of 18.6 per cent in reported cases of venereal disease in 1948 as compared to 1947. The decrease for syphilis alone was 12.2 per cent and gonorrhea represented a decrease of 22 per cent. Though there has been some decline in private physician reporting of syphilis, the decrease for them is not as pronounced as the decline for all reporting agencies. In addition to this it may be noted that the ratio of early syphilis (primary, secondary and early latent) reported to all syphilis reported for both private physicians and other agencies has maintained itself fairly well in this past year. The difference of approximately 2 per cent (a decline) is probably not statistically significant.

Table II, which deals with downstate Illinois cases admitted to rapid treatment facilities at State expense, will indicate that the total admission loads have maintained themselves in 1948 as compared to 1947. Two observations are worthy of note in this connection. We feel that the total load was maintained primarily by the increased admissions of patients with early central nervous system involvement, a condition which, prior to early 1948, was not eligible for rapid treatment in contracted facilities. The increase of such admissions overbalanced the decline in admissions of early infectious or potentially infectious syphilis. The second observation alluded to deals with the decline in utilization of downstate hospital facilities in favor of the two special centers in Chicago and St. Louis. This latter trend is felt to be the result of referral of special problem

cases for careful evaluation which were admitted to these two large centers in favor of the downstate facilities where diagnosis and evaluation are but routine. It is estimated that approximately 50 per cent of all admissions to all facilities were referred by private physicians.

For the fiscal year 1948, 368 treatments given by private physicians were at State expense as compared to 527 in fiscal 1947. This was for patients who lived in areas inaccessible to clinics where they would have received indigent care and who could not be hospitalized for various reasons.

The increase in distribution of drugs to private physicians noted in fiscal 1947 has continued in the fiscal year 1948. The increase in penicillin distribution noted in our last report has maintained itself in fiscal 1948. Whereas in the preceding year over 11 billion units of penicillin were distributed to private physicians, public clinics, hospitals and institutions and rapid treatment centers, in fiscal 1948 there was a further increase of 145 per cent for a total of 27 billion units.

Contact investigations by the Illinois Department of Public Health have continued to show improvement for this period over the preceding year. A 6 per cent improvement has been noted in total contacts examined and in contacts treated through the number of infected contacts found, in relation to those examined, remained at about the same percentage (29 per cent.) The improvement in the examination of contacts was noted not only for all such contacts irrespective of the source of contact information (private physicians, health departments, Armed Services, out-of-state referrals) but also for those revealed by private physicians. In line with the reduction in total numbers of early infectious and potentially infectious syphilis cases and gonorrhea cases reported, there was a similar decline in the total number of contact referrals and investigations.

DOWNSTATE ILLINOIS CASES ADMITTED TO RAPID TREATMENT
FACILITIES FOR THE CALENDAR YEARS 1947-1948

Rapid Treatment Facilities	Period	SYPHILIS						GONORRHEA	OTHER VENEREAL DISEASES
		Total Admissions	Primary and Secondary	Early Latent	Late and Latent	Congenital	Central Nervous System		
Downstate Illinois Hospital Facilities	Jan. to Dec. 1947 Jan. to Dec. 1948	840 685	549 340	238 242	15 27	36 33	2 43	— —	— —
Downstate Illinois Special Ambulant Study	Jan. to Dec. 1947 Jan. to Dec. 1948	93 179	57 79	20 75	15 13	1 10	— 2	— —	— —
Chicago Intensive Treatment Center	Jan. to Dec. 1947 Jan. to Dec. 1948	267 298	116 81	82 85	16 27	11 17	26 83	14 2	2 3
St. Louis Midwestern Medical Center	Jan. to Dec. 1947 Jan. to Dec. 1948	404 444	218 185	103 123	8 30	15 14	44 79	13 5	3 8
All Hospital Facilities	Jan. to Dec. 1947 Jan. to Dec. 1948	1,604 1,606	940 685	443 525	54 97	63 74	72 207	27 7	5 11

Respectfully submitted, I. H. NEECE, M. D., *Chairman*, HARRY CULVER, M. D., NORRIS J. HECKEL, M. D., J. E. WHEELER, M. D., *Committee on Venereal Disease Control*.

In Table I a comparison of venereal disease reporting for 1947 and 1948 by all reporting sources and private physicians has been made.

46,254 cases of venereal disease were reported to the Illinois Department of Public Health in 1948 as compared to 56,858 in 1947, a decrease of 18.6 per cent. Significant decreases in 1948 were apparent for syphilis (12.2 per cent), gonorrhea (22.1 per cent), chancroid (18.5 per cent) and lymphogranuloma (17.3 per cent). A slight increase was noted in the granuloma inguinale reporting.

Although the reporting of early syphilis cases is still in greater numbers than those in the late stages, a sharp decline (19.0 per cent) in the reporting of primary, secondary and early latent cases of syphilis is noted in 1948. A similar decline is noted for gonorrhea in 1948, although the number of cases (28,664) still represents one of the highest totals for gonorrhea reporting in Illinois.

The over-all decrease in reporting of venereal disease by private physicians in 1948 as compared to 1947 was 3.7 per cent. Syphilis cases reported by private physicians in 1948 (8461) and gonorrhea (5568) represented slight decreases from the syphilis and gonorrhea figures in 1947; these differences were 1.9 per cent for syphilis and 6.4 per cent for gonorrhea. In 1947 forty-six per cent of all syphilis cases reported by private physicians were in the infectious and potentially infectious stages; however, in 1948 this percentage decreased to 43.8 per cent, indicating a slight diminution in early syphilis case finding.

It will be noted, however, that though a decline in over-all venereal disease reporting occurred, private physicians in 1948 reported 14,061 cases or 30.4 per cent of the total number, as compared to 14,607 or 26.0 per cent in 1947.

TABLE II. The rapid treatment program of the Illinois Department of Public Health, utilizing private hospital facilities on a per diem basis, has maintained its popularity in 1948. Besides agreements with 20 private hospitals in downstate Illinois, downstate patients have access to the two rapid treatment centers in Chicago and St. Louis. A special study of ambulant therapy, which was developed in 1947 in three large health department centers, was still in operation in 1948. Private physicians and venereal disease clinics may refer cases of early syphilis, congenital syphilis and syphilitic pregnancies, as well as asymptomatic neurosyphilis to these institutions for rapid treatment at State expense.

TABLE II presents a comparison between the years 1947 and 1948 of the number of downstate Illinois cases admitted to rapid treatment facilities. Total admissions in these facilities remained at the same level in 1948 as it was in 1947. Although there was an 18.5 per cent decrease in admissions to downstate facilities, increases were noted in the total admissions for the ambulant therapy study (92.5 per cent), Chicago Intensive Treatment Center (11.6 per cent) and St. Louis Midwestern

Medical Center (9.9 per cent). Though there was a slight decline in the number of early cases of syphilis admitted to all rapid treatment facilities, the total number of admissions to these facilities remained the same, due to the increased number of admissions of asymptomatic neurosyphilis cases.

REPORT OF THE WOMAN'S AUXILIARY

As President of the Woman's Auxiliary to the Illinois State Medical Society, I wish to submit the following report:

1. MEETINGS. Three meetings of the Board of Directors of the Woman's Auxiliary to the Illinois State Medical Society have been held this year. These include the Post-Convention board meeting and two regular board meetings in November and March. A Pre-Convention board meeting will be held on May 16, 1949 in Chicago.

The annual conference for County Presidents and Presidents-Elect was held during the November board meeting. At this conference, the outline for the year's work was discussed by State Officers and County Presidents.

The President has had complete cooperation of all officers in carrying out the work of the Auxiliary.

2. ORGANIZATION. As in former years, organization has been one of the auxiliary's main objectives. We are proud to report the organization of two new counties this year: Crawford County, organized on December 9, 1948, and Mercer County, organized on March 23, 1949. Several new members at large have been added to the Auxiliary list of members.

The Auxiliary wishes to thank the Councilors of the State Medical Society and Presidents of County Medical Societies for their cooperation in our organization work.

The Auxiliary now has twenty-two organized counties and members at large in eleven counties, making representation in (31) thirty-one counties.

3. BENEVOLENCE. The Treasurer has sent a check for One Thousand Two Hundred Forty-One dollars and twelve cents (\$1,241.12) to the benevolence fund to date. Six counties have yet to send their contributions to the fund before the close of the year in May.

4. PUBLIC RELATIONS. The Auxiliary has continued to develop and maintain contacts with other organizations in the various communities. Through these contacts Public Relations programs have been arranged in nearly all organized counties. Such subjects as Pre-Payment Medical Care, Cancer, Tuberculosis and related health programs have been brought before the public.

Several counties use local radio facilities to bring these subjects to the attention of the community.

Student Nurse Recruitment and Welfare programs are being carried out in a number of Auxiliaries.

5. LEGISLATION. This phase of Auxiliary work has developed greatly this year. All counties are cooperating in the fight against the proposed Compulsory Health Program. Qualified speakers on this subject are being presented to lay groups. One Auxiliary member has spoken before more than thirty lay groups. All

Auxiliary members have written Congressmen opposing the proposed Compulsory Health legislation. They have contacted friends asking them to also send such letters to Washington.

A list is being prepared for use by the Speakers Bureau of the Medical Society, of lay organizations in which Auxiliary members are active.

Material is being sent by the State Speakers Bureau to the women who attended the Speakers Conference held in Chicago in February. The legislative chairman has kept in close touch with all counties and mailed out all information received from the National Chairman. Every county legislative chairman is receiving the Bulletin sent by the American Medical Association from Washington.

It is the earnest desire of all members of the Auxiliary to be of further help to the Medical Society in this most important fight against Political Medicine.

6. **HYGEIA.** Hygeia, the authentic health magazine, has been placed in schools, hospitals, libraries, and other public reading places by the Auxiliary. By this means, the Auxiliary hopes to stimulate health education.

7. **SCHOOL OF INSTRUCTION.** One school of instruction has been held this year, another is scheduled to take place in April. The school of instruction is presided over by the State Directors, at which time County Officers and chairmen are instructed in their duties or office, ideals and purposes of the organization.

8. **MEDICAL HISTORY.** The Auxiliary is carrying out the request of the Medical Society in filling out the history blanks which pertain to deceased doctors in the state. The Cook County Auxiliary is working directly with Miss Salmonsens in checking and filing these blanks as they come in from all over the state. This is a most tremendous project and the Auxiliary is proud to be of assistance.

9. **PRESIDENT.** As President, I have visited the following county auxiliaries this year: Adams, Bureau, Madison, Peoria, Sangamon, St. Clair, Vermilion, and Warren. I have attended all but one meeting of my own auxiliary. Invitations have been accepted to visit Cook, Tazewell, and a joint meeting of Logan, Sangamon and Tazewell Counties, before the year has been completed.

The meeting called by the State Society Committee for Speakers in February held in Chicago, was also attended.

The annual convention of the Woman's Auxiliary to the American Medical Association, held in Chicago in June, 1948, was attended, as well as the fifth annual conference for State Presidents and Presidents-Elect, held in Chicago in November, 1948.

The twenty-second annual meeting of the Woman's Auxiliary to the Michigan State Medical Society, held in Detroit in September, 1948, was attended. Invitations to be present at State annual meetings in Missouri, Kentucky, Georgia and Indiana were received by the President, but official duties in her own State prevented acceptance of these invitations.

Close contact has been maintained with State Officers, State Chairmen and County Presidents throughout the

year. It has been most gratifying to have had such splendid cooperation from all concerned.

As President, I wish to thank Dr. Percy E. Hopkins, President; Dr. Darwin B. Pond, chairman, Advisory Committee of the Illinois State Medical Society and mittee members, Dr. Harold M. Camp, Dr. H. Kenneth Scatliff, and Dr. E. G. Beatty, for their splendid cooperation and assistance during the year. To serve under their guidance has been a distinct privilege.

Respectfully submitted, **JOSEPHINE HAMM**, (Mrs. L. N. HAMM) *President, Woman's Auxiliary to the Illinois State Medical Society.*

THE PRESIDENT: There is no unfinished business so we will proceed to new business. We have with us today a gentleman who has been cooperating with Dr. Coleman's Committee. This is a Committee appointed by the Council to confer with Dr. Sharp, Area Medical Administrator of the Medical, Health and Hospital plan for the United Mine Workers Welfare and Retirement Fund. If there is no objection it would afford me pleasure to present Dr. Cecil A. Z. Sharp to very briefly discuss this project.

DR. CECIL A. Z. SHARP: I have been asked to work with the United Mine Workers Welfare and Retirement Fund and help them in establishing their medical care program in this area. The medical care program in Illinois has been in operation only eighteen weeks. The medical care and hospitalization program for the United Mine Workers has been put into operation in some twenty-eight states. Ours is the first and only medical care program that is being placed in operation without limitations for necessary medical care. It is our plan to provide complete medical and hospital care, of the type that is recommended by the family physician, for all beneficiaries of the Welfare Fund and eventually for all working members of the United Mine Workers of America and their dependents.

The Fund is providing a pension of \$100.00 per month for elderly miners and is providing a \$1000 death benefit for their families. We have something like 1000 men killed annually in mining accidents. The Fund provides a \$60 a month disability benefit for the disabled and a benefit for the widows and orphans. All of these people are known to us as beneficiaries of our welfare fund. Many of these people were taken from the relief rolls in Illinois and are now receiving their assistance from us. In addition to their surgical and hospital care at this time, we are providing complete home and office care to all beneficiaries. We have something like 500 doctors, 40 hospitals and 100 druggists in Illinois who are participating in our program. We are now providing the beneficiaries of the Fund complete medical care; except eye glasses and dentistry. In the last two weeks the Fund has authorized the provision of complete hospital care and necessary medical care while in the hospital to all working members and their dependents which means wives and children under 18 years. Our union members are the people you have been treating in the past and they will come back to you as their physician. We recommend that they go back to their own family physician, if he will cooperate with our medical care plan. The bills the physicians are giving

us are quite moderate. They are in line with those given to the Veteran's Administration. We do not want them as low as the public assistance bills nor as high as for a high pay patient; we want a moderate bill. You will provide the patient service and send us the bill at the end of the month. You do not have any collection worries, you do not have to pay an agency 50 per cent for collection of our bills. The hospitals are providing hospital service and we pay the hospital bill. Unlike Blue Cross in some areas that pays only for 21 days, we pay the hospital cost for as long as necessary. We ask your indulgence in trying to keep these bills down. We want these patients placed in the low-cost rooms. We do not expect them to have a corner private room with flowers.

Our program has been very well received. We are particularly grateful for the cooperation we have received from the physicians in Illinois and from Dr. Coleman and the Advisory Committee appointed to work with us. All of us feel that the work we are doing is important. We feel that our work is playing an important part in the prevention of State socialized medicine. We feel that if some people in the State of Illinois receive complete medical care under the auspices of their union and if the physicians and hospitals give them the quality of care that they should receive, this group will never clamor for state medicine.

I would like to say one other thing. We are not using napropaths or chiropractors for our services. I had one patient request the service of a chiropractor saying he had received a great deal of benefit from him and that he was a licensed practitioner. I told him that beauticians were also licensed and we are not providing that service either. We are providing only medical and hospital care. I will be around here tonight and tomorrow and will be very glad to discuss with you personally any questions you may have. If you have any questions call or write me or get in touch with Dr. Coleman. Whatever you do I want to assure you that this is your one grand opportunity to make good medical care available to a low-income group on a mutually satisfactory basis.

THE PRESIDENT: Thank you Dr. Sharp. Dr. Coleman, the Chairman of the Advisory Committee has a supplementary report.

DR. E. P. COLEMAN: Less than two months ago Dr. Sharp asked the Council for an Advisory Committee to consider some of the problems that will come up in his program. We have had three meetings with him and discussed some of the problems that have arisen or will arise. The type of miner and his family who will benefit by the Welfare Fund are those who have been on the charity rolls, or semi-charity rolls. Looking over the program as our Committee has done we feel this is the best thing that has come up in the way of organization planning for the medical care of its members. The basis is complete medical care and it pays 100 per cent. Fortunately the United Mine Workers do not wish to establish a fee bill. Your Committee after some discussion would like to make one recommendation to this House or maybe to the Council. We feel this is a good program. We feel we can properly go along with it. We feel we can not oppose it because it is to the interest

of too many people. It also shows one strong union in the country on our side in contrast to many which are not. We feel since local problems will arise and there will be misunderstanding on the part of the doctors and there will be problems where certain things are overdone. Therefore, there should be a local county advisory Committee in each county where mining is the principal occupation. There may be counties in the state where coal mining is of no significance. In the various counties of the state particularly in the southern portion the Committee feels that an Advisory Committee should be appointed. We do feel that if you have a local county Advisory Committee that when problems do come up they can be taken care of and properly settled on a local basis. We will also have the State Advisory Committee where we will be able to make some suggestions to the County Advisory Committee. We feel that is an important next step and that was the recommendation of the Committee, last night. I believe I am in order to make a motion that this body endorse the formation of County Medical Advisory Committees to advise with the United Mine Workers Welfare Fund. (Motion seconded by Dr. A. E. Dale, Danville).

DR. C. PAUL WHITE, Kewanee: Why is it not possible for the present Advisory Committee for Public Aid in these counties to act in this matter?

DR. COLEMAN: It is possible and it is proper that most counties will have that Committee take up this problem. It can be the local Advisory Committee or another one.

DR. DALE: I think it would be well to take it away from anything that relates to charity. I think a separate Committee should be appointed.

THE PRESIDENT: Dr. Coleman's motion was that Committees be appointed at county level. That would leave it up to the counties. (Motion carried).

THE PRESIDENT: We now come to the presentation of resolutions.

DR. HUTTON: I wish to present the following resolution. There is reorganization taking place in the state government at Springfield. Under that the Division Chiefs will get something like \$2300 more than the Director, Dr. Cross. The Civil Administrative Code sets the salary of officials and that can not be changed without amending the Civil and Administrative Code, which would be extremely difficult. Even if they pass a law to raise the director's salary to an adequate level it would not take place for two years. To obviate that I am offering the following resolution:

Salary of Director of Department of Public Health

Whereas, the compensation of the Director of the Department of Public Health of the State of Illinois is set by the Civil Administrative Code at \$8,000 per annum; and

Whereas, under the reclassification of positions within the Department about to be effected by legislation now pending, the compensation of Division Chiefs under the Director will receive approximately \$2,300 per annum more than the Director; and

Whereas, a study of the problem has indicated that the only feasible solution of this anomalous situation will be through the allocation of funds by the United

States Public Health Service, upon the request of the Governor of the State of Illinois, from which to make additional compensation to the Director of said Department,

Now, therefore, be it resolved that his Excellency, the Honorable Adlai E. Stevenson, Governor of the State of Illinois, be and he is hereby respectfully requested to take such steps as may be necessary to make it possible for the United States Public Health Service to make available sufficient funds so that the Director of the Department of Public Health of the State of Illinois may be compensated in accordance with the importance of that office.

DR. W. O. THOMPSON: This action has been taken before but I think it is wise to reaffirm this position.

A Solution for the Problem of Increasing the Availability of Medical Care

Resolved that the Illinois State Medical Society hereby reaffirm its belief that the best solution for the problem of increasing the availability of medical care is to be found through continuing experimentation with voluntary and competitive prepayment plans, sponsored by non-profit as well as by commercial insurance companies, consistent with the highest standards of medical practice.

DR. W. W. FULLERTON, Steeleville: The following resolution was presented before the Randolph County Medical Society on April 28, 1949, properly moved, seconded and carried:

Objection to Method of Payment for Medical Service to Recipients of Old Age Assistance and Aid to Dependent Children

Whereas, it is the routine of the Welfare Department to pay their recipients of Old Age Assistance and Aid to Dependent Children the money authorized for their medical service,

Whereas, many of these patients are neglectful or unwilling to take the specified money and pay the doctor accordingly, either through sheer dishonesty, senility or mismanagement, but appropriate the funds for their own use,

Whereas, from the above obvious reasons in many instances the doctors are not paid for their services or have a great deal of difficulty in getting their pay,

Be it resolved, that the Randolph County Medical Society in its regular meeting on April 28, 1949, again go on record expressing definite objection to this method of payment and recommending the doctor be paid directly and that such Federal regulation be passed to correct this objectionable practice and such regulation be instituted on its own merits and not be tacked up with some other bill, that the medical profession is opposed to,

Be it further resolved, this resolution be presented by our delegate before the House of Delegates of the Illinois State Medical Society at the next meeting of the House of Delegates and that the House of Delegates adopt a similar resolution.

(signed)

E. R. May, M.D., President

W. W. Fullerton, M.D., Secretary

DR. F. E. BIHSS, East St. Louis: I wish to present the following resolution:

Poll of Members of the State Society as to their Position Concerning Compulsory Health Insurance

Whereas, the proponents of "Socialized Medicine" at every opportunity presenting itself, a small group of physicians voiced their sentiments and opinions and are ardent proponents of the plan favoring any form of compulsory or Federal medicine using the medical profession as a means to portray to the public as the "so-called marked division in the medical provision on this particular subject in favoring of this program" and

Whereas, to our knowledge no poll amongst any large group of physicians had been taken on this subject.

Be it resolved, therefore, that the Illinois State Medical Society poll their members individually as to whether or not they are in favor of "Socialized or Federal or Compulsory Health Insurance Plan". In presenting this resolution we believe that the results of this poll will be very enlightening and will represent the sentiments of this Society as a representative group of practicing physicians of this State in opposing any health compulsory plan that may be presented to the Congress of the United States for adoption.

Be it further resolved, that this resolution is presented from the St. Clair County Medical Society and it is our wish and hope that the Illinois State Medical Society will go on record and adopt and accept this resolution as a whole.

(Signed)

Dr. E. R. Carman, Jackson Co.

W. W. Fullerton, Randolph Co.

Dr. G. C. Otrich, Councilor of the Tenth District

Dr. H. J. Nebel, President

Dr. R. C. Heilingenstein

Dr. J. E. Wheeler, Delegate

Dr. F. E. Bihss, Delegate

THE PRESIDENT: We have been notified by the American Medical Association that our membership is such as to entitle us to one additional delegate to the House of Delegates of the American Medical Association. Certainly such a delegate should be on an equitable basis: There should not be any squabble about it. This is no time to squabble among ourselves. We must show a united front and maintain it. How do you wish to dispose of this matter?

DR. W. O. THOMPSON: I should like to move that the Chairman of the Council appoint a Committee to consider this matter and bring in a recommendation. It seems to me that this is something that should be given most serious thought and we should not try to arrive at a quick decision. (Motion seconded by Dr. H. K. Scatlift, Chicago).

DR. E. S. HAMILTON, Kankakee: I would like to amend this motion to the effect that this Committee be appointed by the President and consist of five members from downstate and five members from the Chicago Medical Society, with the President and Secretary ex officio, and that they meet and report as soon as possible. (Amendment seconded by Dr. H. K. Scatlift, Chicago).

The amendment was voted on and carried and the original motion as amended was carried.

THE PRESIDENT: I would request each of you gentlemen who are Chairmen of the various Committees to please come forward and announce the time and meeting place of your reference committee.

THE SECRETARY: This report from the Committee on Mental Hygiene came too late to be published in the Handbook. I should like to read it.

REPORT OF COMMITTEE ON MENTAL HYGIENE

This year the committee on Mental Hygiene of the Illinois State Medical Society has cooperated with some local and national organizations in an attempt to improve mental health. The chairman was a member of the Children's Commission of the Illinois Society for Mental Hygiene, whose aim it is to establish a treatment center in Illinois for emotionally disturbed children. He also took part in a survey conducted by the American Psychiatry Association of the Mental Hygiene activities in the country.

The committee continues to bring to the attention of the medical profession, the importance of mental hygiene. It is taking an active interest in the work of the State Institutions for the mentally ill, and is advocating more facilities for the patients. The committee is particularly interested in the education of borderline mentally handicapped children in Illinois.

The committee is composed of a physician who is an educational psychologist, two pediatricians, a general practitioner and the director of the Illinois Mental Hygiene Society.

It is with deep regret that we report the death of Dr. Bert Beverly, an active member of our committee for several years. His place on the committee has been taken by Dr. Mandel Sherman of the University of Chicago.

Respectfully submitted,
(Signed)

ABRAHAM LEVINSON, M.D., Chairman

THE PRESIDENT: This report will be referred to the Reference Committee on Miscellaneous Business.

THE SECRETARY: I have an important report from Dr. Louis H. Bauer of New York relative to the World Medical Association of which he is Secretary. This article will appear in the June issue of the Illinois Medical Journal. It is hoped that a good many of our men will join this Society and pay the annual dues. (See June issue, Page 326).

THE PRESIDENT: There is no further business on the agenda and I will entertain a motion to adjourn.

DR. H. K. SCATLIFF, Chicago: I move that we adjourn until 9 o'clock Wednesday morning. (Motion seconded by Dr. W. E. Kittler, Rochelle and carried).

In The August Issue—

A Picture Story

On The 1949

Annual Meeting

NEWS OF THE STATE



CHAMPAIGN COUNTY

Dr. Russell A. Gage, Indianapolis, discussed "Common Oral Lesions" before the Champaign County Medical Society, June 9.

COOK COUNTY

William Hamlin Wilder Memorial Lecture.—Dr. Arthur J. Bedell, professor of ophthalmology emeritus, Albany Medical College, will deliver the fourth William Hamlin Wilder Memorial Lecture of the Institute of Medicine of Chicago, Friday evening, October 14, 1949, at 8 p.m. His subject is to be announced.

Personal.—"Diagnosis and Management of Common Gynecological Conditions" was discussed by Dr. Walter J. Reich, Chicago, before the Tippecanoe County Medical Society, in Lafayette, Indiana, recently. Dr. Louis B. Newman has been recently appointed as a member of the Medical Advisory and Consultant Board of the Armour Research Foundation of Illinois Institute of Technology, Chicago. This board is to select suitable problems for research in the medical field and to advise an engineering staff on the medical aspects of these problems. Dr. Newman, who is Chief of the Physical Medicine and Rehabilitation Service at the Veterans Administration Hospital, Hines, received his degree in mechanical engineering from the Illinois Institute of Technology just prior to studying medicine.

Dr. Bettag Heads Tuberculosis Sanitarium.—Dr. O. L. Bettag, Chicago and Pontiac, has been ap-

pointed medical superintendent and tuberculosis control officer of the Municipal Tuberculosis Sanitarium. Press reports indicate that the new appointment combines two offices formerly held by Dr. George Turner who was medical superintendent and Dr. Arthur W. Newitt, resigned. Dr. Turner, who has been serving as acting superintendent, returned to his activities as a staff member.

Staff Outing.—The annual staff and intern alumni day of St. Luke's Hospital medical staff was held June 22, 1949, at the Lake Geneva Country Club. The day was devoted to golf, tennis and boating.

University News.—Dr. Walter L. Palmer, professor of medicine, University of Chicago School of Medicine, discussed "The Management of Chronic Abdominal Complaints" during an assembly hour at the University of Illinois College of Medicine, May 18. A similar meeting, May 25, was addressed by Mr. Louis Bromfield, noted author and exponent of conservation, on "Conservation and Human Survival."

Student Research Award.—Edward H. Lanphier, Dixon, has been named the winner of the Borden Undergraduate Research Award for 1949 at the University of Illinois College of Medicine.

The award represents a gift of \$500.

Lanphier, who received his doctor of medicine degree from the University of Illinois in June, has been conducting research work in the department of pharmacology since 1946. He has been investigating numerous chemical compounds for potential value in the treatment of epilepsy, and is the author of many scientific and non-scientific publications.

Fellowship Award.—Dr. Seymour Levine of the University of Illinois College of Medicine has been awarded a fellowship for two years by the Atomic Energy Commission.

The fellowship will enable Dr. Levine to carry on his studies of the nutritional factors in the growth of molds which cause diseases. He is conducting these studies under the direction of Dr. L. O. Krampitz of Western Reserve Medical School, Cleveland, O.

Dr. Levine will spend the first six months of the fellowship in taking special courses at the Colorado Center at Denver, which was established by the Atomic Energy Commission.

Dr. Levine has been a member of the staff of the University of Illinois as an assistant in bacteriology since 1945.

Initiation of Sigma Xi.—Twelve faculty members and students were initiated at the 21st annual meeting of the University of Illinois chapter of Sigma Xi society, May 19, at the Chicago Illini Union.

Dr. Louis N. Ridenour, Urbana, dean of the University of Illinois Graduate College, delivered the annual address. Dr. Ridenour discussed "Terrestrial Power Sources and Human Civilization".

Faculty members and students who were initiated are Dr. George H. Pollock, Dr. Joseph G. Schoolman, Dr. Theodore R. Sherrod, Dr. Ralph R. Sonnenschein, Dr. Seymour N. Stein, Dr. Welton I. Taylor, Arthur V. Boand, Jr., Edward N. Gilman, Ervin Kaplan, Sholen Postel, Mrs. Betty Howard Siegel, and Dr. Donald S. Bickers.

Dr. Harold E. Silverman, a member of the staff of the Chicago Medical School, also was initiated.

Construction Starts on Tuberculosis Building.—Gov. Adlai E. Stevenson broke ground May 20, for the Institution for Tuberculosis Research in the Medical Center District on Chicago's near West Side.

The Institution will supply the anti-tuberculosis vaccine, BCG, and instruments of vaccination to health agencies in the U. S. and abroad. Research will be directed toward improvement of the vaccine, tuberculosis prevention, and related fields. Another objective of the new unit will be to instruct health officers in the use of BCG.

Dr. Karl A. Meyer, medical superintendent of Cook County Hospital and other county institutions, presided at the half-hour ceremony.

Speakers included Governor Stevenson, Mayor Martin F. Kennelly, Dr. Walter H. Theobald, president of the Medical Center Commission; Dr. Roland R. Cross, Director of the State Department of Public Health; Dr. Ernest E. Irons, president of the board of directors of the Municipal Tuberculosis Sanatorium; Herbert R. DeYoung, president of the Tuberculosis Institute of Chicago and Cook County; Park Livingston, president of the board of directors of the Research Foundation; and Dr. A. C. Ivy, vice-president of the University of Illinois in charge of the Chicago Professional Colleges.

Research on the use of the vaccine BCG, which is named for French Scientists Albert Calmette and Camille Guérin, has been conducted in Chicago since 1934 when the first strain of the bacillus was brought to this country from Paris.

The strain was brought here by Dr. Sol R. Rosenthal of the University of Illinois College of Medicine, at the suggestion of Dr. Frederick Tice, who was president of the board of directors of M.T.S. and chief of the attending staff of Cook County Hospital at that time.

Research with the vaccine started with newborn infants at Cook County, and later was expanded to include all Chicago infants born to tuberculous parents. A rigidly-controlled program of clinical research since has been broadened to warrant the attention and approval of the medical division of the National Tuberculosis Association, the American Medical Association, state medical societies, and the U. S. Public Health Service.

The vaccine is being used throughout the world. Some 30,000,000 Japanese have been vaccinated since 1944. In Denmark, not a single case of tuberculosis meningitis has occurred among BCG vaccinated children during the past eight years. The World Health Organization is spending \$2,000,000 on a BCG vaccination program in Europe, and proposes to extend its program. In France and Norway, BCG vaccination has been made compulsory for non-tuberculin reactors.

Special Society Election.—The Chicago Pediatric Society chose the following officers at its meeting, May 25: Dr. Arthur F. Abt, president; Dr. Alvah L. Newcomb, vice president; Dr. Alfred S. Traisman, secretary and Dr. Craig D. Butler, treasurer.

DE WITT COUNTY

Dr. Edward M. Thompson was recently named health officer for the De Witt-Piatt County Health Department.

EFFINGHAM COUNTY

Dr. Gillesby Goes to Missouri.—Dr. W. J. Gillesby, formerly secretary of the Effingham County Medical Society, has left Effingham to accept a position on the staff of the Veterans Administration Hospital in Springfield, Missouri.

Fifty Year Member.—Dr. Frank Buckmaster, Effingham, was presented with the Fifty Year Club insignia of the Illinois State Medical Society at the regular monthly meeting of the Effingham County Medical Society, May 19. The presentation of the emblem and certificate of membership in the Fifty Year Club was made by Dr. Andy Hall, Mount Vernon. Dr. Buckmaster graduated at Barnes Medical College in St. Louis, 1899. He launched his practice in Beecher City, later going to Altamont but located in Effingham in 1906.

FULTON COUNTY

Community Honors Physician.—A public meeting was held in the Community High School in

Farmington, May 20, to honor Dr. E. K. Dimmitt, who has been practicing there for forty years. Dr. Frank D. Jacobs, Farmington, acted as master of ceremonies and introduced the following visiting physicians: E. P. Coleman, H. B. Shepard, D. A. Bennett, and L. L. Vitt, all of Canton; J. W. and J. K. Welch, Cuba; E. E. Davis, Avon; A. H. Clark, Elmwood; M. A. Quinones, Lewistown; James H. Walsh, W. W. Cutter, William Cooley, John Vonachen, all of Peoria and James C. Fash, a nephew of Dr. Dimmitt. Mrs. Signe Thomas, superintendent of the Graham Hospital, Canton, also was present. A bound volume containing words of appreciation by patients and friends of the physician and a silver plaque were among the gifts presented to the physician. Dr. Dimmitt was nominated last September by the Fulton County Medical Society as its own outstanding general practitioner.

LOGAN

Dr. W. W. Coleman, Lincoln, who recently retired after fifty years of practice of medicine, has turned over his practice to Dr. Frederick Swanson of Yukon, Alaska. Dr. Coleman is a past president of the Logan County Medical Society.

MCDONOUGH

Dr. Wisshack Named to Board of Health.—Dr. Eric E. Wisshack was appointed, May 4, to serve as temporary chairman of the Macomb board of health, taking the place of Dr. B. D. Jenkins who is ill. Other members of the board are Dr. V. B. Adams and Dr. W. E. Carnahan.

MC LEAN

Dr. Gerald M. Cline, Bloomington, has been appointed a member of the Illinois Commission for Handicapped Children by Governor Stevenson, filling the vacancy caused by the death of Dr. Bert I. Beverly, Chicago.

ROCK ISLAND

Philip Waters Retires.—After nearly thirty-five years in state welfare work, Dr. Philip S. Waters, superintendent of the East Moline State Hospital, retired May 7, according to the Rock Island Argus. Dr. A. H. Wolff, assistant superintendent, will assume Dr. Waters' post until a permanent appointment is made. Dr. Waters, who became superintendent March 15, 1942, began welfare work at the Anna State Hospital as staff physician in 1931. Previously he had practiced privately for nine years after graduating from Barnes Medical College in 1904. In 1918 he was named assistant superintendent of the Alton State Hospital and after six years was transferred to Peoria where he remained until 1926. For three years Dr. Waters returned to private practice but in 1929 he was appointed superintendent of the Lincoln State school and colony. In 1941 he was chosen superintendent of the Peoria State Hospital.

WILL

Dr. Le Roy L. Fatherree has been appointed health officer for the Will County Health Department, with offices in Joliet.

WOODFORD

Dr. Gordon Honored.—A testimonial dinner was held, May 9, to honor Dr. R. E. Gordon, El Paso, on his completion of fifty-six years practice of medicine. The Kiwanis Club was host at the dinner. Dr. Gordon, according to the Minonk News Dispatch, has served on practically every board of importance of a community nature, the Board of Education, Public Health board, hospital boards, Mayor and alderman of El Paso, member of the board of directors of the Woodford County National Bank, an active part in Masonic and Kiwanis work and a staunch supporter of his church. Another unique contribution Dr. Gordon made to El Paso was the installation of telephone service. In 1901 he opened a telephone exchange with the switchboard in his home.

Dr. Gordon is not only from a family of doctors but has descendents who are continuing in that profession. His grandfather was a physician at Greenville many years ago; his father practiced in Carlyle; his son, Dr. Noel E. Gordon, is now practicing in Minonk, and he has two grandsons who are preparing for the study of medicine at the present time. The Gordon family has already had twenty-eight doctors in its ranks, including Dr. Gordon's father and seven uncles.

GENERAL

Conference on the Exceptional Child.—The Sixth Governor's Conference on Exceptional Children was held at the La Salle Hotel, Chicago, June 3. The professional staff of the Illinois Children's Hospital-School demonstrated how the several specialties responsible for the rehabilitation and education of the child coordinate their work into one program.

Medical School Polio Team Activated for Epidemic Assistance.—In the event of an infantile paralysis epidemic anywhere in the nation, the Northwestern University poliomyelitis team is ready for action.

One of only four in the nation, the Medical School unit is on call to aid polio-stricken communities anywhere in the United States. With Dr. Emil D. W. Hauser, assistant professor of bone and joint surgery, as its director, the team is assigned to duty and its expenses paid by the National Foundation for Infantile Paralysis. The crew has been on duty five years, and has served in Boise, Idaho, and Rockford and Peoria, Ill.

Services of the team include medical consultation to doctors of the affected community; teaching local hospital nurses proper bed posture for patients and the administration of hot packs; and instruction in physical therapy techniques of muscle re-education and general functional exercises.

The N. U. Medical School team is prepared to stay on duty up to six weeks, or until its work of organization, teaching and medical assistance is completed. Subsequently, the assistant orthopedist of the unit will remain in the stricken city as long as he is required.

Members of the Northwestern 1949 team, in addition to Dr. Hauser, are Dr. Arthur F. Abt, associate professor of pediatrics; Dr. E. J. Cummins, orthopedist; Miss Meredith Nordschow, instructor in physical medicine; Miss Anne Prochaska, chief physical therapist; and Mrs. Jean Sciora and Miss Lucille Kurzawa, physical therapist. In addition, provision has been made for the services of a medical social worker if the need arises.

Other teams similarly organized under the National Foundation are those at Stanford and Harvard Universities and the D. T. Watson School of Physical Therapy, Leetsdale, Pa.

Nursing Education Institute.—A conference on nursing education was held at the Leland Hotel, Springfield, June 3-4, under the auspices of the Illinois Department of Public Health, the Illinois Department of Registration and Education and the Illinois Society for Mental Hygiene. Included among the speakers were the following: Dr. David Slight, "Mental Hygiene and the Nursing Profession"; Dr. Sophie S. Sloman, "Personality Development in Early Childhood"; Dr. Adrian Vander Veer, "Reaction of Children to Illness"; Miss Helen Ross, "Personality Development in Late Childhood and Early Adolescence" and Dr. George Perkins, "Personality Development in Late Adolescence."

"It's Your Life."—Chicago's own health documentary radio show, IT'S YOUR LIFE which has won five awards for excellence as the "most outstanding radio program of 1949," now is heard from 3:30 to 4 p.m., Sundays on WMAQ.

The show, formerly heard at 11:15 a.m. weekdays on WMAQ, was shifted to the new time to accommodate its vast listening audience. Featuring actual tape-recorded stories of Chicagoans and their health problems, IT'S YOUR LIFE is produced by the Chicago Industrial Health Association with the aid of the medical profession working with the more than 300 Chicago health and welfare agencies.

Each week the program presents a complete case history of a Chicago resident who has fought and won his battle for better health. Ben Park is producer and Don Herbert interviewer on the show. Listeners are taken into homes, hospitals, nurseries, welfare agencies and everywhere in the city where the real-life drama of everyday living takes place.

Though only in its 30th week, the show has attracted nationwide attention in the health education field and as a public service feature.

Congress on Obstetrics and Gynecology.—The Scientific and Educational Exhibit committee of the International and Fourth American Congress on Obstetrics and Gynecology meeting, May 14, 1950 at the Statler Hotel, New York City, under the

Chairmanship of Dr. John Parks of Washington, D. C. and the Committee on Motion Pictures with Dr. Archibald D. Campbell of Montreal, Canada, as Chairman, have completed preliminary plans for their respective sections of the meeting and are ready to issue application blanks for space and time. These blanks are designed to facilitate the work of the committees in selecting and presenting exhibits and films of the greatest value and to make it easy for the applicants to present a complete description of their proposed displays. They will be sent on request by the business office of the American Congress at 24 West Ohio Street, Chicago 10, Illinois, and, when completed, go directly to the chairman of the committee involved.

The members of the Scientific and Educational Committee working with Doctor Parks are: Dr. Miguel V. Falsia of Buenos Aires, Sir Eardley Holland of London, Dr. Mortimer N. Hyams of New York, Dr. Alice F. Maxwell of San Francisco, Dr. Lawrence M. Randall of Rochester, Dr. Jorge de Rezende of Rio de Janeiro, Dr. Erik Rydberg of Copenhagen, Dr. Donald G. Tollefson of Los Angeles and Dr. Frank E. Whitacre of Memphis.

The members of the Committee on Motion Pictures working with Doctor Campbell are: Dr. David N. Barrows of New York, Dr. Willard R. Cooke of Galveston, Dr. Samuel A. Cosgrove of Jersey City, Dr. Carl Henry Davis of Wilmington, Dr. Ludwig A. Emge of San Francisco, Dr. Albert W. Holmon of Portland, Dr. Edmundo G. Murray of Buenos Aires and Dr. Robert A. Ross of Durham.

Welfare Department Statistics.—The resident population in all institutions of the Department of Public Welfare April 30, 1949, was 48,044 — an increase of 1,121 over April 30, 1948. On the books of all institutions, including those present, in family care, on conditional discharge and other absentees, were 54,409.

The greatest increase over April of last year was in the nine hospitals for the mentally ill, in which the population rose 971. There were 1,100 admissions, 766 discharges and 302 deaths during the month. There were 38,600 patients on the books of these hospitals April 30, 1949. The institutions for the mentally defective (Dixon State Hospital and Lincoln State School and Colony) showed an increase of 111 over the previous year. The resident population was 9,332 with 10,620 on the books. There were 344 in Security Hospital and of this number 271 were mentally ill and 73 were mentally deficient. At Neuropsychiatric Institute, where most admissions are temporary for special treatment, 73 patients were present at the end of the month. Of this number, 62 were admitted during the month. Clinics for trachoma control and prevention of blindness in southern Illinois treated 488 patients for trachoma, 59 for glaucoma, and 386 for other eye ailments. Nineteen patients were hospitalized for operations. The Illinois Eye and Ear Infirmary received 8,318 patients in the Clinic

and listed 19,744 treatments during April. Four hundred forty-three persons were admitted to the hospital. The Chicago Community Clinic reported 629 interviews during the month. Of this number, 605 were former patients in State hospitals — 248 at Elgin, 243 at Manteno, 31 at Chicago, 81 at Kankakee and 2 at Jacksonville.

The Boys' Training School, Girls' Training School, and Women's Reformatory reported 947 juvenile delinquents, felons and misdemeanants present April 30, 1949. Fifty-seven were received from courts and 53 were discharged during the month. There were 230 pupils enrolled at the School for the Blind, 397 at the School for the Deaf, and 326 at Soldiers' and Sailors' Children's School April 30, 1949. There were 78 children present at Children's Hospital-School — an increase of 21 over the previous year. The Industrial Home for the Blind, Soldiers' and Sailors' Home, and Soldiers' Widows' Home reported 1,332 present April 30, 1949 — a decrease of 16 as compared to one year ago. The Veterans' Rehabilitation Center in Chicago, and Veterans Clinics in Aurora, Champaign, and Rockford received 91 new cases during the month. There were 1,086 visits to the clinic in Chicago, 17 in Aurora, 210 in Champaign, and 35 in Rockford. Since opening of these Centers, 5,299 veterans have received treatment at Chicago, 44 at Aurora, 182 at Champaign, and 22 at Rockford. The Division of Veterans' Service reported 3,011 veterans present in all Welfare institutions April 30, 1949. Of this number, 1,720 were World War I veterans and 731 were World War II veterans. The Institute for Juvenile Research interviewed 136 new cases during the month. A total of 503 children and 637 adults, old and new cases, were examined and received treatment. The Division of Supervision of Delinquents reported 35 placements in boarding homes, free homes and wage homes during the month. In addition, 1,280 patients were interviewed in out-patient clinics, and there were 2,398 visits to these clinics. Besides the 48,044 persons housed in institutions April 30, 1949, 21,670 persons received treatment in Department of Public Welfare clinics during April.

HEALTH DEPARTMENT ACTIVITIES

Cancer Diagnostic Clinic Opens.—The 25th downstate Illinois cancer diagnostic clinic to be located in the Good Samaritan hospital, Mt. Vernon, began operations Tuesday, June 7. Dr. Roland R. Cross, state director of public health, announced recently. This clinic is scheduled to receive patients on the first Tuesday of each month.

Of the 25 cancer diagnostic clinics now functioning downstate, 22 are state aided. In Cook county, there are 21 cancer clinics which are maintained solely by local funds.

Dr. G. Howard Gowen, chief of the state division of cancer control, stated that on the basis of the present Illinois population, we should have a total

of 40 more cancer diagnostic clinics throughout the state. The United States Public Health Service and the American Cancer Society, in February of this year, recommended that such a clinic be established for every 100,000 persons.

Although Illinois, with a clinic for every 187,000 persons, ranks well with most states, Connecticut, with a clinic for each 55,000, Massachusetts, with one for every 140,000, and New York, with a clinic for every 150,000, are well in advance of this state in this public health facility.

"Our cancer control program will not begin to attain the maximum life-saving results until we are fully equipped to detect cancer at its earliest diagnosable and curable stage," Dr. Gowen said.

DEATHS

DAVID ALEXANDER, Chicago, who graduated at the College of Physicians and Surgeons of Chicago, School of Medicine of the University of Illinois in 1907, died January 13, aged 84, of chronic myocarditis.

WALLACE MCMURRAY BURROUGHS, St. Charles, who graduated at Northwestern University Medical School in 1893, died March 25, aged 78, of chronic myocardial degeneration.

PETER JOSEPH CHRISTENSON, Chicago, who graduated at Jenner Medical College in 1904, died May 19, aged 71. He had practiced medicine on Chicago's west side for 45 years.

SIDNEY B. CONGER, Chicago, who graduated at Chicago College of Medicine and Surgery in 1914, died May 29, aged 59.

HUGH A. CUTHBERTSON, retired, Chicago, who graduated at the University of Toronto Faculty of Medicine, Toronto, Canada, in 1894, died at St. Petersburg, Florida, April 21, aged 80. He was a member of the "Fifty Year Club" of the Illinois State Medical Society.

ROLAND JORDAN DUNN, Chicago, who graduated at Rush Medical College in 1897, died March 10, aged 73, of cerebral thrombosis.

DANIEL WEBSTER EISS, retired, Evanston, who graduated at Northwestern University Medical School in 1889, died May 22, aged 89. He had practiced medicine in Chicago nearly 50 years until his retirement about 15 years ago.

WILLIAM ERNEST HOLLAND, Chicago, who graduated at Illinois Medical College, Chicago, in 1897, died March 29, aged 82, of intestinal obstruction and pyloric stenosis.

EDWARD JOSEPH HORODKO, Chicago, who graduated at Loyola University School of Medicine in 1941, died in St. Elizabeth Hospital, New Georgia, Solomon Islands, March 27, aged 33, of acute myelogenous leukemia. He served during World War II and was awarded the Bronze Star Medal for meritorious achievement.

REID OWEN HOWSER, Oak Park, who graduated at Northwestern University Medical School in 1909, died May 17, aged 69. He had practiced medicine in Austin

and Oak Park for 39 years and was on the surgical staff of West Suburban Hospital.

JOHN BRANSON JONES, Wapella, who graduated at the University of Illinois College of Medicine in 1905, died May 2, aged 72. He practiced medicine in California for eleven years and later in Wapella for 33 years.

JAMES LANG LEWIS, Danville, who graduated at Northwestern University Medical School in 1901, died March 29, aged 75, of cerebral thrombosis. Was formerly affiliated with Veterans Administration hospitals in Alexandria, La., and Hines, Ill., where he was chief of the tuberculosis service for many years.

EDWIN EVERETT MADDEN, Forest Park, who graduated at Reliance Medical College, Chicago, in 1909, died in March, aged 72.

FRANK ELLSWORTH PETERS, Winnetka, who graduated at Rush Medical College in 1929, died in Sarasota, Fla., February 15, aged 48, of chronic glomerular

nephritis and congestive heart failure.

MARVIN SMITH, Lebanon, who graduated at the University of the City of New York Medical Department in 1883, died in St. Elizabeth's Hospital, Belleville, January 30, aged 88, of cerebral arteriosclerosis.

PHILIP H. SMITH, Evanston, who graduated at Northwestern University Medical School in 1927, died May 24, in Wesley Memorial Hospital, aged 49. He was an associate in obstetrics and gynecology at Northwestern University Medical School.

JOSEPH CORNELIUS WEBER, retired, Olney, who graduated at Missouri Medical College, St. Louis, in 1899, died May 3, aged 73. He had been ill for 13 years.

WILLIAM J. WHITEFORT, St. Elmo, who graduated at Missouri Medical College, St. Louis, in 1898, died May 22, aged 74. He had practiced medicine in Fayette County for 51 years, and was a member of the "Fifty Year Club" of the Illinois State Medical Society.

"For The Common Good"

Six Months of Health Education on WGN-TV.—

The Educational Committee of the Illinois State Medical Society completed six months of health education via the medium of television, June 14. Carried on in cooperation with WGN-TV as a public information service, the weekly series has met with popular response, and it is estimated that at least 100,000 persons are viewing the programs. According to *Television Forecast*, there are approximately 100,000 television sets in the Chicago Area, 95 per cent of which are in homes. The viewing distance is some fifty miles. Recognizing that television is still in its infancy, the potentialities as an educational instrument are evident.

Thus far very little information has been advanced on television viewing on the general health. Eye strain could be associated with long period of viewing. Since children are more likely to indulge in excessive watching of the screen, parental control would be a logical factor in prevention of fatigue.

The May 17 telecast was titled "Breathing Through Your Nose", in which Dr. Maurice Cottle used photographs and patients to demonstrate what repair did in the way of breathing and cosmetic improvement. He also showed visual material to explain the preparation of masks before surgery was undertaken. Since this program occurred during the Annual Meeting of the Illinois State Medical Society, at which Dr. Lee Hoyt, Roseville, was presented with his award as the 1948 Outstanding General Practitioner, four minutes of the

program was devoted to introducing Dr. Hoyt, showing his award, and hearing his reminiscences of early days of practice.

"Peptic Ulcer" with Dr. Howard B. Carroll was the show, May 24. Three patients were used to demonstrate various ulcer types.

"The Story of X-Ray" was told by Dr. Warren W. Furey, May 31. Visual media included an early tube, a modern one, numerous roentgenograms, the mixing of barium and an improvisation to explain the difference in x-ray and the fluoroscope.

"Geriatrics and You" was the theme of the telecast, June 7, with Dr. Gilbert H. Marquardt again using patients to demonstrate chronologic and physiologic age and the need for avocations in this business of growing old.

"Your Child's Dental Health" was the title of the program June 14, with Robert Kesel, D.D.S., and Donald Kerr, D.D.S. Youngsters in an Aurora experimental project demonstrated good brushing procedure, and oversized dental models gave visual emphasis.

The Educational Committee has not repeated a subject, although some requests indicated a wish for a second program. It is unfortunate that there is no method by which a permanent record can be made of the telecasts because of their vast educational scope, but undoubtedly this too will come.

Scripts are prepared in advance by the Secretary of the Educational Committee and the guest physi-

cian. All scripts are in the studio one week before the program.

Cooperation with the studio is of vast importance in developing technic, procedure and utilizing material. The Educational Committee was an amateur in this type of health education, but the staff of WGN-TV, individually and collectively, has been zealous and patient in making suggestions, and teaching. Too much praise cannot be given to Jay Faraghan, program director; Cosmo Genovese, studio producer; Charles Setsema, stage director, and the camera and control room crew. Marilyn Lassen, public relations, and Jerry Gardiner, traffic manager, have been of inestimable assistance in explaining detail.

Studio cooperation was further evidenced in the television exhibit of the Educational Committee during the recent annual meeting. A beautifully colored panel, conceived by George Petterson and Bob Stebbins of WGN-TV's art staff, told with photographs the "inside" story of studio production of health education telecasts. RCA lent one of its recent models to enhance the display. The novel exhibit was of great interest to physicians and exhibitors alike.

Firms who have cooperated by providing equipment from time to time include Ohio Chemical Company, Cambridge Instrument Company and Picker X-Ray Corporation.

Lectures Arranged Through the Educational Committee of the Illinois State Medical Society:

Florence Rees, Chicago, Henry B. Lloyd PTA in Chicago, May 25, on "The Story of Menstruation."

David Slight, Chicago, Fox Valley District, Illinois Welfare Association in Elmhurst, June 8, on The Professional Worker and the Job.

J. Charles McMillan Jr., Oak Park, Bellwood Registered Nurses Association in Bellwood, June 17, on Penicillin and Its Uses.

Rex D. Hammond, Bryn Mawr Community Church, Chicago, October 10, Emotions of the Adult.

Lectures Arranged Through the Scientific Service Committee of the Illinois State Medical Society:

John R. Vonachen, Peoria, La Salle County Medical Society in La Salle, September 8, on Etiology of Diarrheas in Children and Present Day Management.

John T. Reynolds, Chicago, Bureau County Medical Society in Princeton, Surgical Emergencies in the Newborn.

Samuel M. Bluefarb, Chicago, Effingham County Medical Society, in Effingham, September 15, Newer Methods of Treatment in the Common Dermatoses.

S. William Becker, Chicago, Macon County Medical Society in Decatur, September 20, on Common Diseases of the Skin, illustrated.

John Huffman, Chicago, Iroquois County Medical Society in Watseka, September 20, on Vaginitis.

RADIOISOTOPE AIDS DOCTORS WHO PERFORM BRAIN SURGERY

Difficult surgery for brain tumors is being made easier by radioactive phosphorus produced in atomic energy laboratories.

Writing in the May 21 Journal of the American Medical Association, B. Selverstone, M. D., A. K. Solomon, M. D., and W. H. Sweet, M. D., Boston, say that in 14 cases they were able to locate brain tumors at the time of operation by use of the isotope.

When radioactive phosphorus was given to these patients in injections, it became concentrated in the brain tumors. The doctors were then able to locate the tumors by using as a probe a miniature model of the Geiger-Muller counter, an instrument that measures radioactivity. The precise location of the tumor was shown by an increase in the counting rate of the instrument.

CURARE PREPARATION RELIEVES SYMPTOMS OF ARTHRITIS

A preparation of a South American arrow poison, curare, is bringing relief to persons suffering from the painful chronic disease, rheumatoid spondylitis, a form of arthritis that affects the spine.

Use of the preparation, d-tubocurine suspended in oil and wax, is reported by Bernard M. Norcross, M. D., and Harold M. Robins, M. D., of the University of Buffalo Medical School, Buffalo, N. Y., in the May 28 Journal of the American Medical Association.

In six cases in which the doctors administered the preparation after other treatment usually prescribed for the disease had failed to produce improvement, the patients were relieved of pain, their muscles were relaxed, deformity of the spine was corrected, and they were able to take more exercise.

Practically no toxic effects from use of the preparation were noted, the doctors say.

The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

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Theodore R. Van Dellen, ASSOCIATE EDITOR.

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Vol. 96, No. 2



August, 1949

1950 ANNUAL MEETING TO BE HELD IN SPRINGFIELD

The Council of the Illinois State Medical Society was given the responsibility by the House of Delegates to select the place and time for the 1950 Annual Meeting. It was strongly urged by the House of Delegates, that a meeting outside of Chicago be arranged if suitable accommodations could be found. Following a critical survey made by members of the Secretary's staff and Dr. Coye C. Mason, Director of Scientific Exhibits, it was found that the city of Springfield can now provide adequate facilities for a successful meeting.

The Council has voted unanimously to hold the 1950 meeting in Springfield on May 23, 24, 25, which will be Tuesday, Wednesday and Thursday. The Technical and Scientific Exhibits, as well as general assembly scientific meetings will be held in the large Illinois State Armory, which has a floor space of approximately 20,000 square feet. Special meetings will be arranged for at nearby hotels.

Springfield hotels have given definite assurance that they will make all facilities available and with the Chamber of Commerce, and Sangamon County Medical Society, along with other local organizations, will aid in every way possible to help in making the meeting an outstanding one.

The Chairman for the Committee on Arrangements, will be Dr. Jacob E. Reisch of Springfield. Within a relatively short time, all committees will be selected, and plans will be under way to insure that all desired local arrangements will be made at an early date.

This will be the first meeting of the Society to be held outside of Chicago since 1942. The last downstate meeting was held in Springfield that year. The large state Armory has not been previously available for meetings of the Society, and members will be agreeably surprised to see the facilities which are now available for a really big meeting. More details will be published in an early issue of the Illinois Medical Journal, and it is hoped that the members of this Society will plan early to aid in making the 1950 annual meeting one which will compare most favorably with the successful meetings of recent years.

THE UNITED MINE WORKERS' HEALTH AND WELFARE PROGRAM

After a trial period of trying to provide medical, surgical and hospital care to beneficiaries of the United Mine Workers of America Welfare and Retirement Fund, and hospital and specialist care to the working miners and their dependents, the Fund has decided to simplify

the procedures for the provision of medical, surgical and hospital care. All physicians in Illinois who have attended a patient authorized for treatment by the UMWA Welfare and Retirement Fund during the past five months were recently sent a form letter and a blank for the physician to indicate whether or not he would be willing to accept patients to be cared for under the auspices of the Welfare and Retirement Fund. Those letters were sent out over the signature of Dr. Cecil A. Z. Sharp, Area Medical Administrator for the St. Louis Area Medical Office, which serves the State of Illinois. Those physicians who responded on the blank and indicated that they were willing to provide home and office care, or accept referred patients; at a moderate fee, have had their names placed on one of two lists. The first list headed "Doctors Rendering Home and Office Care" contains the names of those physicians accepted for providing home and office care. The second list headed "Doctors Accepting Referred Cases" contains the names of those physicians giving particular emphasis to certain phases of medical practice who indicated that they would be willing to accept referred cases at a moderate fee. The United Mine Workers of America Local Union officials in Illinois will be given a list of the "Doctors Rendering Home and Office Care" and will instruct those individuals receiving assistance or pension from the Welfare and Retirement Fund that they may contact one of these physicians when and if they need medical care. Each family receiving a Welfare grant has a form from the Welfare Fund entitled "Authorization for Grant." The patient will present this "Authorization for Grant" together with his stub from his last benefit check which will serve as his proper identification. The physician will be provided with a regular billing form and will bill the Fund directly for services rendered the patient. The physician, at his discretion, may refer the patient to another physician either on the list of "Doctors Rendering Home and Office Care" or on the list of "Doctors Accepting Referred Cases". He may also refer the patient to a hospital and if hospitalization is indicated he will be provided with a list of hospitals cooperating with the Welfare and Retirement Fund. The cooperating physician will be provided with prescription blanks to be used for beneficiaries of the Welfare Fund. The

patient should take his prescription in duplicate to one of the cooperating druggists, a list of which will be placed in the hands of the cooperating physicians. The simplicity of the whole arrangement is its most valuable asset.

The working United Mine Workers of America miner and his dependents are entitled to necessary hospitalization and medical and surgical care while in the hospital. A working miner requiring hospitalization will ask his physician to give him a note stating that he needs to go to the hospital, take this note to his Local Union Secretary and secure a "Hospitalization Slip." This slip may be presented to any of the hospitals on the list of "cooperating hospitals." The "Hospitalization Slip" will be picked up by the hospital and attached to the billing form provided by the Welfare and Retirement Fund. Medical and surgical care not requiring hospital care will not be provided to working miners and their dependents at this time. The Council of the Illinois State Medical Society and the House of Delegates were assured by Dr. Cecil A. Z. Sharp, Area Medical Administrator, during the recent meeting of the Illinois State Medical Society that any ethical physician in Illinois who is willing to provide medical services to the beneficiaries of the Welfare Fund or to the working miners while in the hospital and to the Fund at a moderate rate, could have their names added to the list of cooperating physicians. Never in history has the medical profession been offered such complete responsibility in a program for the provision of medical and hospital care. All services will be provided on an ethical fee for service basis. So long as the physicians of Illinois cooperate by providing a high quality of medical care at a reasonable moderate cost, we can be assured that we will have a large group of individuals who will be satisfied with the provision of medical care on an individual basis and will not be clamoring to have the State provide a poor quality of "free" medical care. In order to maintain the good name of medical care in the State of Illinois, the Council has appointed a Medical Advisory Committee to cooperate with the Area Medical Administrator in his arrangements with Illinois physicians for the provision of medical and surgical care. It is also recommended in those areas where coal is actually produced by United Mine Workers

of America miners that a County Advisory Committee be appointed to consider local problems and cooperate with the State Advisory Committee and with Dr. Cecil A. Z. Sharp. It is not necessary for us to point out to Illinois physicians that while they are dealing with a multi-million dollar Welfare Fund that their patients are not multi-millionaires but the recipients of Welfare Assistance or laborers and that as a laboring group they are entitled to moderate fees for the services rendered. Any physician having a specific question should address it either to Dr. Cecil A. Z. Sharp, Area Medical Administrator, United Mine Workers of America Welfare and Retirement Fund, 34 No. Brentwood Boulevard, St. Louis 5, Missouri, or to any member of the state Medical Advisory Committee consisting of Dr. Everett P. Coleman, Chairman, Canton, Dr. G. C. Otrich, Belleville, Dr. C. O. Lane, West Frankfort, Dr. W. I. Lewis, Herrin, Dr. B. E. Montgomery, Harrisburg, Dr. Ralph S. Sabine, Murphysboro, Dr. W. A. Monaghan, Taylorville.

TELEVISION AND "EYE STRAIN"

Ever since the publication of the physiologic researches of Donders of Utrecht in his classic treatise on "the Anomalies of Refraction and Accommodation" in 1858, physicians, scientists and quacks have been interested in the subject of "eye strain" and its effect upon the human individual in a complex world. Dr. William Thomson in 1879 in a paper on "Astigmatism as a Cause for Persistent Headache and Other Nervous Symptoms" enumerated pain in the brow, temples and occiput, a sense of fullness in the head amounting to vertigo and nausea, insomnia, loss of appetite, fear of impending apoplexy or epilepsy, general nervous prostration, choreic twitching of the muscles of the head and face and a host of other symptoms all of which he had seen relieved by correcting the astigmatic eyes of these patients. S. Weir Mitchell of Philadelphia went to considerable length in 1874 to point out the part that eye strain played in the symptomatology of his psychiatric patients, and described instances where some of these individuals were cured by wearing a proper pair of glasses. Since then the American people particularly, have become thoroughly indoctrinated in the belief that a pair of glasses will cure headaches, nervousness, inattention, faulty read-

ing, muscle twitching, poor hygiene of living and so on. Furthermore they have been subjected for years to the false and pernicious propaganda that "wearing the wrong glasses will injure or ruin the eyes." No organic disease of the eye has ever been proved to be due to eye strain or to wearing of wrong glasses.

A person says he has "eye strain", (called asthenopia, if he pays extra) when for any reason the use of his eyes is uncomfortable. There is no question but that the correction of refractive errors, ocular muscle imbalance and perhaps even aniseikonia has afforded relief to many patients. But the fact remains that many patients with these optical errors have a tolerance and show no symptoms, while others who have been correctly diagnosed and meticulously refracted and corrected still have asthenopia.

Many of the latter group have congestion of the conjunctiva due to other than local infective causes such as allergy, insomnia, hypothyroidism, vitamin deficiency and what not. This condition has been appropriately termed "conjunctival asthenopia." Since many of these people have photophobia, due perhaps to hyperemia of the iris, the use of tinted glasses is popular.

Still another group of "asthenopes" have "mental fatigue" due to weak motivation that is projected to their eyes. When there is a deep enough incentive and interest a person in this group can read for hours at a stretch without eye strain; but give him something to read that bores him stiff and his eyes "go bad" in a very short time. An astigmatic adolescent boy, for example, can read a lurid sex book through at one sitting, in a dim light, without complaining of his eyes. Place a dull history book in front of him and assign him an hour's lesson in a properly lighted room and in a remarkably short time his eyes bother him so that he is unable to get on with his task.

This is not to belittle what is called the hygiene of vision. This consists of paying attention to all of the rules for good health in general and includes proper and adequate lighting without glare, and the correction of refractive errors and ocular muscle anomalies if these are truly factors. It pays the same part in the comfortable and efficient use of our eyes as the proper environment of temperature, proper food, comfortable surroundings and furniture, and so on,

do for the accomplishment of tasks by other parts of our bodies.

When movies were first invented people were fearful of the effect upon their eyes and ophthalmologists, or oculists as they were then known, were bombarded with questions about it. Their pompous words of advice sound familiar to us today. The flickering pictures of the primitive nickel shows appeared to disturb our eyes but no damage was done and as improvements followed in the natural evolution of the cinema the fear of ocular injury entirely disappeared.

Television has lead to the same situation in our day. The ophthalmologist and the family physician are daily questioned about whether or not harm to the eyes can come from viewing it. As the novelty wears off and improvements come, these fears too are gradually disappearing. It is safe to say that no organic ocular disease can be attributed to the television habit.

It is common sense however to see to it that the programs are viewed under the most favorable circumstances. In a answer to a query, the Journal of the American Medical Association published the following sensible suggestions that deserve emphasis:

1. In general, a large screen is considered better than a small one, because it allows clearer vision at a greater distance and gives a large visual angle.

2. A distance of ten feet or more away from the screen would, in general, be better than a shorter distance, provided that the size of the screen and of the room would permit.

3. The nearer perpendicularly the screen is viewed, the better. Too much of an angle produces distortion and makes coordination of the two images received by the eyes difficult. (It might be added here that since most of our visual work is done at the level or below of our eyes, it would seem better especially for children, to have the screen at eye level.)

4. Although there is not a definite time limit for watching television, some discretion should be used, and it should not be persisted in beyond the point of fatigue (or boredom).

5. Daylight screens, in general, are considered better than the ordinary ones because they are compatible with more light in the room, thus reducing the contrast between screen and surrounding objects.

6. Although television in itself does not produce eye strain, it requires all the important components of the visual act. Since we know that there is a very large personal factor and people vary in their capacity to carry on various visual tasks, there will be more enjoyment if the rules given above are followed. People with defects in convergence, accommodation, fusion and refraction may suffer ocular discomfort sooner than others. There is no reason why they can't close their eyes and listen to the inane and puerile chatter from the loud speaker instead, if they want to.

Derrick Vail, M.D.

HEALTH IMPROVEMENT ASSOCIATIONS IN ILLINOIS

Organization of Health Improvement Associations in several counties of Illinois during the past year is demonstrating that it is possible for people of this state to solve their health-care problems the voluntary way. Members of the medical profession in these counties, and throughout the state, are joining in this campaign to bring a new and higher standard of health to rural areas.

Recognizing the need for an adequate program to protect the health and welfare of their communities, farm and civic leaders of Bureau, Cass, Cook, Hancock, Kendall, Lake, La Salle, Macon, McLean, Schuyler-Brown, Vermilion, and Warren counties have formed county Health Improvement Associations to study rural health and to make recommendations and outline programs which will lead to a better program of health in those communities. DuPage, Kane, Livingston and Will counties also have established similar organizations to meet the needs of their people.

The early success of these associations in meeting some of their goals has led observers in the medical and hospital fields to predict that they are destined to perform a most effective service for the people of Illinois by introducing many health measures which will be of immeasurable value. The spread of these organizations to new counties is an indication of the ability of the HIA, as each association is popularly known, to serve the people's health requirements voluntarily.

In each county, HIA has selected sponsorship of an enrollment in Blue Cross Plan for Hospi-

tal Care as its first project for better health. Blue Cross is the nonprofit community service organization which provides hospital care benefits for members through an easy, voluntary, prepayment program, a need which is as great for rural residents as it is for urban industrial and professional workers.

Blue Cross enrollments through HIA are unique in that residents of each county volunteer to contact their neighbors to explain the Blue Cross movement and to take applications for membership. HIA serves in each county as the collecting and remitting agency for Blue Cross, thus giving rural residents the advantage of group membership dues.

The Illinois State Medical Society, following policies outlined by The American Medical Association, has been urging the formation of Health Improvement Associations throughout the state and asking that physicians everywhere take an active part in the organization and development of MIA groups in their counties. Because the county medical societies are in the best position to determine community health needs, they should contribute guidance and supervision of health projects established by the organizations.

Working together, doctors and farmers of Illinois are meeting the problem of rural health face to face and are doing something about it today—not waiting until it is too late to solve voluntarily. They are meeting the challenge of those who would foist socialized medicine on the people and they are working, with Blue Cross, to provide an adequate health program for rural areas at a cost that is low.

Organization of Health Improvement Associations is rural Illinois' answer to government interference and the bureaucratic bungling of a compulsory, federal health insurance program. Rural areas are accomplishing their goals in the traditional American spirit of free enterprise.

AS OTHERS SEE US!

In a recent public opinion survey conducted by the National Society for Medical Research many questions were asked relative to the practice of medicine, animal experimentation, etc. The report was too long to be published in full but the replies to the following two questions came close to home.

2. A. What is your opinion of *most* doctors today?

B. Why do you feel this way?

46% . . . Well trained, competent

8 .. Hard-working, conscientious

7 .. Friendly, interested, humanitarian

14 .. Miscellaneous and unexplained approval

12 .. Too mercenary

8 .. Cold, unfriendly, lack of personal interest

6 .. Incompetent, poorly trained

5 .. Too narrow in training and outlook

3 .. Too much specialization

2 .. Miscellaneous and unexplained disapproval

7 .. Don't know, can't generalize

118% . . . Some gave more than one answer
3. Do you think most doctors are *too* interested in making money from their patients or not?

35% . . Most are

57 .. Most are not

8 .. Don't know

100%

A. (IF "MOST ARE") What makes you feel this way?

Percent of

Sub-group

32% . . Overcharge, fees too high

19 .. Won't treat you unless you have the money, won't take poor patients, won't answer calls if bill is outstanding, etc.

13 .. Give unnecessary and expensive treatments in order to charge more, unnecessary consultations for fee-splitting, keep you coming back

5 .. Want an office practice, won't make home calls, night calls

5 .. Rush from one patient to another to get as many as they can

2 .. Oppose low-cost medical care plans

19 .. Personal experiences with doctors, kind unspecified

- 7 .. Miscellaneous
1 .. Don't know

103% .. Some gave more than one answer

HOSPITAL BIRTHS IN ILLINOIS

The following chart is included to demonstrate that the trend for hospital deliveries is definitely on the increase in Illinois. The percentages are not the highest in the country but compare most favorably with other industrial states having a large negro and foreign population.

BIRTHS IN ILLINOIS, PERCENT OF
BIRTHS IN HOSPITALS BY YEAR:
FROM 1943 thru 1948

Year	Total Births*	Births in Hospitals	Percent in Hospitals
6 year total	991,145	907,966	91.6
1943	156,059	136,648	87.6
1944	141,854	126,884	89.4
1945	137,969	126,306	91.5
1946	174,927	161,879	92.5
1947	196,045	183,487	93.6
1948	184,291†	172,762	93.7

* Occurrence

† Provisional

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF HOSPITAL CONSTRUCTION
AND SERVICES MARCH 30, 1949

ILLINOIS PHYSICIANS EXHIBIT ART

The eleventh annual exhibition of the American Physicians Art Association was held at the Atlantic City meeting of the American Medical Association June 6-10. Illinois physicians were well represented in the various fields. According to the catalogue issued to those in attendance, the following Illinois men had entered the following subjects:

STEFAN H. BALOGH, Chicago, Illinois
Ashtray (copper)
Schooldoor in Hungary (print)
ALFRED PAUL BAY, M. D., Manteno
Dorothy (photograph)
JOSEPH E. BELLAS, Peoria
De Caritate (Oil, non-objective)
Seascape (oil, landscape)
ARTHUR A. BREWER, Alton
Anticipation (photograph)
Icy Decoration (photograph)

CARL W. CHRISTENSEN, Waukegan
Lo! The Fallen Angel (water color)
The Plucked Flower (water color)
JACOB A. GLASSMAN, Chicago
Cat — Looking (Oil, portrait)
Indian Warrior with One Eye (Oil, portrait)
GEORGE S. GLASSHOFF, Chicago
Still Life (oil)
The Patriarch (Oil, portrait)
LOIS D. GREENE, Highland Park
Young Girl (oil)
Art Student (oil)
EMID D. W. HAUSER, Chicago
Winter Retreat (water color)
Dudes and Cowboys Playing Ball (water color)
MILTON D. HEIFETZ, Cicero
Pride (sculpture)
HARRY L. HOOTNICK, Chicago
Sleep Baby Sleep (photograph)
T. ARTHUR JOHNSON, Rockford
Lantern Gate, Casa Blanca (photograph)
BERNARD KLEIN, Joliet
Cat-nap (photograph)
Symbol of Tranquility (photograph)
JOHN E. KRAUS, Peoria
The Old Coal Mine (oil)
HAROLD LAUFMAN, Chicago
Figure (wood work)
Figure (oil)
E. C. LAWLER, Chicago
Brave Diver of Mexico (photograph)
Tranquility (photograph)
W. A. MALCOLM, Peoria
Annye (oil)
The D. P. (oil)
RAYMOND W. McNEALY, Chicago
Rural Mexico (water color)
Back Street (water color)
DELLA W. MOUSSA, Chicago
Torso of a Dancer (oil)
JOSEPH K. NARAT, Chicago
How to Keep Cool in the Operating Room
(drawing)
JACK H. OSTER, Chicago
Good Friends (photography)
Vacation on the Farm (photography)
JOHN I. PERL, Chicago
Chimerical Interior (oil)
Negev (oil)
BEN Z. RAPPAPORT, Glencoe
Betty (drawing)
Still Life (oil)
H. L. RHETTA, Chicago
Old Man (water color)
Constable's cottage (water color)
MAURICE A. SCHILLER, Chicago
Talmud (oil)
Yellow table (oil)
M. F. STEIN, Chicago
Night Harbor (oil)
Happy Warrior (oil)

MAX THOREK, Chicago
Somewhere in Italy (photograph)
Ad Astra (photograph)

C. MARTIN WOOD, Decatur
Passing Storm (oil)
Native-Fountain, Guatemala (oil)

LEO M. ZIMMERMAN, Chicago
Female Figure (wood work)
Wood Carving (wood work)

Late arrivals,

S. L. GABBY, Elgin
Trees (needle work)

O. B. GILTNER, Sheffield
Unusual Cumulus Clouds (photograph)
Tranquility (photograph)

T. ARTHUR JOHNSON, Rockford
The Old Lighthouse (oil)

W. F. KALISZ, Chicago
Nubian (oil)

BERNARD SAYRE, Chicago
Mandy (oil)
Mottville (oil)

BEATRICE RAYMOND, Chicago
In the Next Street (oil)
Portrait of Jerry (water color)

ROUND TABLE ON HOW THE NEW ZEALAND MED. PLAN WORKS

The occasion for this discussion was a two hour meeting of four New Zealanders and four Americans. The match that set it off was the statement, "Your plantation medical system is just like the present New Zealand plan", and the answer, "Oh no, it isn't." The discussion ended with two very strong convictions: (1) That the plantation plan is not like the New Zealand system because the plantation system still demands private initiative and is not a compulsory one. Rewards come in relation to the effort expended and the work done. There is also no way of padding the income by doing unnecessary superficial work. The plantation doctors are paid to keep people well, and they receive the same pay whether they make one call or ten. (2) The New Zealand system is wonderful for the ease with which a doctor can make a good living but detrimental to the developing of high medical ethics and detrimental to the giving of the best medical service to the people of New Zealand.

I will try to illustrate the reasons for these conclusions by quoting a few of the pros and cons:

U.S.: "Can anybody go to any doctor they wish whenever they are sick?"

N.Z.: "Yes. A patient can go to ten different doctors in one day, and for each call the doctor can collect 7'6 which the government will pay. If the patient should go to a specialist who col-

lects his regular fee of, two guineas, then the patient can get 7'6 back from the government, providing the doctor gives him a receipt for the money. So, you see, it is easy for the patient, and the doctor is paid for everything he does, and he can continue to conduct his own private practice."

U.S.: "Doesn't that tend to make the doctors have patients return for unnecessary calls, and make the patients run to doctors for the most trivial condition?"

N.Z.: "Well, there are doctors who formerly were barely getting by and who now are rolling in luxury. It is one of the abuses, but it is hoped in time such abuses will disappear."

Other N.Z.'ers.: "You know very well, it will get worse rather than better. It is only a matter of time before the politicians will cut doctor fees. The method enhances dishonesty, and rewards are highest to the careless and most unscrupulous."

U.S.: "What about drugs? Is there no limit?"

N.Z.: "No. A patient would feel cheated if he was not sent to the chemist for medicine. You see, the chemist pays the patient two pennies for each empty bottle returned."

Other N.Z.'er.: "I discovered my maid pouring medicine down the sink and asked her why she was wasting good medicine. Said she, 'I'm all better now and can get two pennies for the bottle.' The chemists who formerly seemed down at the heels, now have shops that fairly sparkle

and shine. The national drug bill has risen to fantastic heights, an amount equal to that of the doctors' income."

U.S.: "That seems wasteful, but do you think the health of the people has improved?"

N.Z.: "There is no question that the health of the children has improved inasmuch as ten shillings a week is paid for every child regardless of the family income. Of course, it has cost the government a great deal, but all the children are better fed."

Other N. Z'ers.: "Yes, and now the children of New Zealand are being reared without a sense of responsibility, on the principle of getting more than they earn, of living with 'security' assured without effort, of getting without giving, and many of the doctors do receive beyond their capacity to give in service. The slogan of 'something for nothing' is eating the soul out of New Zealand. The accumulated reserve of the war years is rapidly being dissipated, and the forty hour week with the philosophy of do as little as you can get away with, does not earn sufficient money to pay for these 'services'. In spite of rationing meat, butter and most essentials, we are rapidly becoming a bankrupt nation, but more serious is the fact that we are developing a bankrupt soul. 'Good!' you say. Bah! most of us say, good for nothing! The taxes take all our earnings."

U.S.: "What about laboratory service and hospital care?"

N.Z.: "All kinds of laboratory work can be done without cost to the patient. The reports will be sent to the doctor the patient designates or the doctor can send the patient to any laboratory and get the reports directly. The laboratory is paid by the Government on a definite fee basis, and the laboratory men are satisfied. As far as hospitals are concerned, there is no cost to the patient. The government hospitals have small and large wards. All private hospitals are overcrowded, and there is at least a three weeks waiting period in order to get into a private hospital. The private hospital is paid nine shillings a day per patient. That much is deducted from the patient's bill.

Other N. Z'er.: "The three weeks period that one must wait to get into a private hospital indicates the patients' dissatisfaction with the public hospitals. There is no question that more hospi-

tal days are used than necessary. There is an unnecessary waste of money.

U.S.: "Well, there doesn't seem to be an unanimity of opinion regarding the blessings, but from what I gather, you attract a poorer quality of men into medicine, encourage the poorer doctors to make more than they earn because 'the government will pay.' The system encourages dishonesty and the dishonest use of medicine. The cost of medical care is reaching astronomical heights without any visible improvement in health (except for the money you allot to feed the children) or character, and some evidence indicates the reverse. These results and the fact that three out of four intelligent New Zealanders believe the abuses far outweigh the good points, lead me to conclude with a fervent hope that America never tries such an expensive gold brick. It shines brightly on the surface, but beneath the bright exterior is ordinary clay."

Other N.Z'ers.: "Hear! Hear!"

N.Z.: "You are all wrong. The abuses will eventually be controlled, and then we will have a bright, new world."

U.S.: "But isn't the fundamental philosophy wrong. No strong man or strong nation ever arose without pain, suffering and struggle. Remove these; pass out security to everyone, and you sell the soul of strength and independence 'down the river'. Rome fell because of that. Leaders never developed on 'sweet honey pie' talk. We are sad to see that New Zealand has been sold a bill of goods that sounds like the golden beetle of plenty but which history tells us will become a termite eating at the roots of the nation. Given time, the tree will fall. Even the medical profession will grow weak on guarantees and assurances of a good living on minimum effort. Isn't that wrong?"

Other N.Z'ers.: "Just so. Just so!"

N.Z.: "I think you paint it a bit gloomy. We do make a bit of money, but the government takes it all back in taxes. Actually we now work mostly for the government, so where is all your ease and comfort? Most of us can make in a four day week as much as we can keep, so we have three days for fishing and boating. That will make our souls rugged, and when the people have no doctors during weekends, they will have enough worries to strengthen their souls. Yes.

(Continued on page 96)

STATE DEPARTMENT OF PUBLIC HEALTH



Public Health Legislation Passed by the 66th General Assembly

In its deliberations the General Assembly considered about 100 bills that had some relationship to health, health services or the Department of Public Health. These bills dealt with a wide variety of subjects ranging from the famous "dog pound" bill to the control of thioglycolate used in home permanent waves. Not all of these bills passed both Houses. The bills of public health significance now awaiting final action by the Governor are summarized in the following paragraphs:

S.B.244—County and Multiple County Health Departments

This Bill amends the law in relation to the establishment and maintenance of county and multiple county health departments. It provides that when a petition signed by the required number of voters in the required number of townships has been presented to the county board, the board shall by official action instruct the county clerk to put the issue on the ballot. The law prior to this amendment was in some areas of the State interpreted to mean that the

county board of supervisors may, at their discretion, act upon a properly presented petition. The Bill was amended on second reading in the House to provide that the issue may not come to ballot less often than once in four years. The Bill prescribes the manner in which the County Health Fund is to be drawn upon for the purposes of the Act and provides for the election of a treasurer to the Board of Health wherein such Board serves a multiple County Health Department and the duly elected county treasurer of any one of the counties is not empowered to act in the interest of the multiple county governmental function.

S.B. 248-251-TB. Research Institute.

S.B.248 provides for the reappropriation of \$330,000 for the establishment of the Institute of Tuberculosis Research in Chicago. This sum was appropriated by the 65th General Assembly, but, due to the delays in construction projects, this amount of the original appropriation was not expended by the close of the fiscal year.

S.B. 249-250 relate to the administration of the TB Institute in Chicago. S.B.249 transfers the Institute from the Medical Center Commission to the University of Illinois. S.B.250 amends the Act establishing the Institute by placing full authority in the University and creates an Advisory Board of five medical directors to serve for a term of five years each.

S.B.251 appropriates \$143,000 to the University of Illinois for the operation of the Institute.

S.B.277—Sanitary Water Board.
This Bill amends the law governing the operation of the Sanitary Water Board. This Board comprised of the Directors of the Departments of Public Health, Agriculture, Conservation, Public Works and Buildings and a representative of the manufacturing interests of the State appointed by the Governor, has certain powers and duties with regard to the control of pollution of the surface and underground water supplies. This Bill strengthens the hand of this all important Board and permits them to act where there is evidence of a threat of pollution rather than waiting until actual pollution has taken place. The Board is given more authority over the control of sewage systems.

S.B. 278-281—Water Pollution.
These bills make the necessary amendments required for Illinois municipalities and sanitary districts to participate, if desired, in certain provisions of P.L. 845, passed by the 80th Congress. This Federal legislation came about through material interest in stream pollution control, (especially in the Ohio River Basin) and through the recognition that Federal assistance may be necessary for some areas in the preparation of plans and in the financing of construction. The amendments designate the manner of issuing bonds for the purposes of these laws governing sewage facilities.

S.B.297—Hospital Construction Act.
This Bill amends the Illinois Hospital Construction Act passed by the 65th General Assembly in order to define a health center and to extend the provisions of the original act to the health facility termed health center.

S.B. 360-362—Care of Tuberculosis.
S.B. 360 provides that the State shall pay a subsidy of not more than \$3 per day for each patient with tuberculosis who is obtaining inpatient care at public expense in lawfully operated hospitals or sanitariums. A total of \$5,000,000

was included in the Bill, not more than \$100,000 of which could be expended for administrative expenses. The subsidy is not an outright per-patient payment, but is contingent upon the local levy of the maximum permissible tax for tuberculosis control and upon the demonstration that these local funds are insufficient to provide adequate sanitarium care for persons with tuberculosis in the jurisdiction. The program is to be administered by the State Department of Public Health.

S.B.362 appropriates to the State Department of Public Health the sum of \$1,000,000 for needed repair, rehabilitation, alteration or expansion of public Tuberculosis Sanitariums and for needed equipment. The Department is given authority to prescribe reasonable rules and regulations governing the expenditure of this grant.

S.B.390—Powers and Duties of the Department of Public Health.

This Bill amends Section 55 of the Civil Administrative Code. It authorizes the Department of Public Health to establish and enforce minimum sanitary standards for the operation of public water supplies; to require plans and specifications prior to any changes in public water supply systems; to inspect recreational, tourist and trailer camps and to enforce sanitary management of them.

Of particular concern to physicians is the authority given the Department to establish and enforce minimum standards for the operation of laboratories which make examinations in connection with the diagnosis of disease or tests for the evaluation of health hazards; to issue certificates of competency to persons making such tests.

S.B.408
This Bill provides the appropriation to the Department of Public Health for the biennium July 1, 1949-June 30, 1951.

In connection with S.B.408 it may be of interest to compare the appropriation for the 65th and the 66th Bienniums by category of Service:

	65th Biennium 1947-49	66th Biennium 1949-51
Division of :		
General Administration	\$ 307,036	\$ 393,546
Cancer Control	94,974	94,574
Communicable Diseases	395,889	424,689
Hospital Construction & Services	80,000	307,320
Hotel & Lodging House Inspection	299,311	148,101

Industrial Hygiene	125,345	145,745
Laboratories	947,233	1,136,113
Local Health Administration	2,136,297	2,561,631
Maternal & Child Health	166,979	166,979
Public Health Dentistry	30,742	135,182
Public Health Education	167,585	173,185
Public Health Nursing	72,601	73,530
Sanitary Engineering	322,709	559,237
Tuberculosis Control	104,040	116,180
Venereal Disease Control	189,685	213,505
Vital Statistics & Records	405,983	463,833
	<hr/> \$5,846,409	<hr/> \$7,113,350

S.B.409—Hospital Districts.

This Bill is a re-draft of the Hospital Authority Act (65th G.A.) found unconstitutional in September 1948. The new Bill was drafted after study of the unconstitutional features of the old law. The Bill authorizes the establishment of a Hospital District in any contiguous territory of the State having a population less than 10,000. Provisions are made for the Hospital District, when legally created to locate, establish and maintain hospitals. The District may issue bonds secured by taxes the levy for which may not exceed .075 per cent for hospital purposes.

S.B.473—Marriage Test for Gonorrhea.

This Bill amends Section 6a of the Marriages Act by striking those phrases which require the microscopic examination of smears from the genitalia for gonococci. The requirement of the serologic test for syphilis prior to marriage remains unaltered.

S.B.655—Reappropriations.

Section 4 of this Bill reappropriates \$4,116, 121 to the Department of Finance to cover the unliquidated encumbrances made by the Department of Public Health during the 65th Biennium for the construction of public and non-profit hospitals in accordance with the Illinois Hospital Construction Act. These funds cover the balance due on authorizations for grants-in-aid for the construction of 14 hospitals now in various stages of completion.

Section 5 of this Bill reappropriates \$5,594, 631 unexpended encumbrances involved in the construction of the State Tuberculosis Hospitals at Chicago and Mt. Vernon.

S.B.680—Appropriations for certain additional ordinary, contingent and distributive expenses of State government.

Three million dollars is appropriated for continuation of the grants-in-aid program for the

construction of public and non-profit hospitals which qualify under the Illinois Hospital Construction Act, and \$1,682,716 is appropriated for completing construction and equipment of the State tuberculosis hospitals at Chicago and Mt. Vernon.

H.B. 856 and 857—Pasteurized Milk and Grade A Milk.

These Bills make detailed changes in the laws governing the handling, processing, labelling, sale and distribution of pasteurized milk and milk products and Grade A milk and milk products.

CONFERENCES ON HOSPITAL FOOD SERVICE

Recognizing the importance of good nutrition to the welfare of the sick, and mindful of the special need of hospitals for guidance in their food service problems, the Department of Public Health in collaboration with the Illinois Hospital Association and the Illinois Dietetics Association recently sponsored a series of conferences on hospital food service. This was the second series of meetings, the first of which was held two years ago. The 1949 series of one-day meetings were held in each of the following cities: On May 17—Breese, May 18—Olney, May 25—Aurora, May 26—Moline, June 1—Danville, June 2—Springfield.

The program which was presented at each of the conference centers was as follows:

- The Administrator's Interest in Food Service
 - George A. Lindsley, Hospital Consultant
 - Division of Hospital Construction and Services
 - State Department of Public Health
- Quality Food — Slides of Attractive Tray Set-ups, obtained from
 - Mrs. Mary Harman Riste, Chief Dietitian
 - Butterworth Hospital, Grand Rapids, Michigan
- Current Trend in Diet Therapy
 - Pearl Lewis, Consultant Dietitian
 - Chicago, Illinois
- Sanitary Food Practice
 - Douglas B. Morton, Sanitary Engineer
 - Division of Sanitary Engineering
 - State Department of Public Health
- Employee Training — Round Table Discussion Conducted by
 - Wilma R. Robinson, Consultant Dietitian
 - Division of Hospital Construction and Services
 - State Department of Public Health

The program was planned primarily to assist those in charge of the hospital food service in the smaller hospitals which do not have suffi-

cient dietary problems or financial resources to employ full-time qualified dietitians. The attendance was not, however, limited to representatives of the small hospitals and many dietitians, hospital administrators, nurses, office managers from hospitals of all sizes were there. Chief among the registrants, of course, were food service supervisors, cooks and kitchen helpers. Local public health personnel, college instructors in home economics and their students were also in attendance.

The growing interest in the field of hospital food service is indeed commendable. With this new interest and the improved equipment for food preparation and service, the old epithets on hospital cooking are fast becoming a matter of legend. The special efforts on the part of the hospital trustees and administrators merit commendation and, chances are that the food service supervisor, essentially a cook at heart, may produce even greater wonders upon encouragement by the medical staff.

NEW ZEALAND (Continued)

indeed, we will remain strong. The plan is good!"

U.S.: "I hope so. But, what price security! Give me struggle! 'Happiness consists in overcoming obstacles' was expounded after centuries of experience. 'Give me more while I do less' is an unproven slogan and not developed from actual experience. One must wonder and ponder in this age of nostums, antagonisms and violence, but it can be fun watching the great revolution and wondering where we are going to land. For the present I would rather be watching New Zealand medically from this distance than to be living in it."

The conclusions reached seem to agree with those of no less an authority than Gen. Paul R. Hawley who wrote in the "Blue Cross Bulletin": "I am convinced that the provision of health care under the government would be the most extravagant experiment the taxpayer has yet been forced to support. He would pay not alone in money, but in his own health and in the health of those dependent upon him."

From Plantation Health, published quarterly on Oahu under sponsorship of The Hawaiian Sugar Planters' Association, Volume XII, October, 1948, Number 4.

HEART GROUPS TO MERGE

— Preliminary steps for merging the American Foundation for High Blood Pressure with the American Heart Association have been approved by the boards of both groups, it was announced today by A. W. Robertson, Chairman of the Board of the American Heart Association.

The high blood pressure group will thus become a Section of the American Heart Association's Scientific Council and will be known as the Council for High Blood Pressure Research. Other Sections within the Association's Scientific Council now include the Section on Circulation and the American Council on Rheumatic Fever.

Ignored tuberculosis progresses. An organized regimen, active treatment, awareness of the possibilities and cooperation are necessary to cure or check the disease. Scarcoïdosis may be entirely ignored, and with few exceptions the patient does just as well, or better, than with medical intervention. There is an environmental and family factor in tuberculosis. Great stress is laid on finding the infection source — the contact. Henry E. Michelson, M. D., J. A. M. A., April 17, 1948.

Tuberculosis in industry can be controlled as an integral part of a general health program, although constant vigilance is indicated. Fred B. Wishard, M. D., Am. Rev. Tuberc., June 1948.

CORRESPONDENCE



PUBLIC HEALTH OFFICERS NEEDED FOR JAPAN

To The Editor:—

The Department of the Army is urgently in need of Public Health Officers to serve in a civilian capacity with the occupation forces in Japan. These positions, which involve supervision of Japanese prefecture (state) health departments in all phases of preventive medicine and medical care programs, offer an excellent opportunity for broad experience in public health. We will greatly appreciate your assistance in locating qualified and interested candidates for this program.

Minimum acceptable qualification requirements are a degree in medicine plus one year internship. Experience in public health is desirable but is not mandatory.

The salary for these positions is \$6235.20 per annum plus 10% post differential with quarters provided at no cost to the employee. Individuals selected for appointment must agree to remain a minimum of two years. Transportation is furnish to and from Japan. Dependents may join the employee in approximately 6 to 8 months after his arrival in the command.

It will be appreciated if you will publicize this information and advise interested applicants to make formal application by submitting Civil Service Commission Form 57 to this office.

Forms may be obtained from any Class A Post Office.

The necessity for immediate recruitment of qualified and suitable personnel cannot be over-emphasized. Your assistance in this vital program will be most beneficial to the Department of the Army.

Sincerely yours,

CHARLES C. FURMAN
Chief, Recruitment Section
Overseas Affairs Branch
Civilian Personnel Division

"YOUR MENTAL HOSPITALS" GERIATRICS

The lengthening of the span of life brings with it a progressive increase in the problems associated with old age. There is an increase in the diseases of old age, as well as an increase of mental illnesses associated with arteriosclerosis and senility.

The number of elderly patients with varying degrees of organic impairment and social incapacity becomes greater each year with increasing longevity and better geriatric care. The elderly patient, therefore, presents one of the most important factors in the present day overcrowding in the mental hospitals. Specific treatment which can be given to these elderly patients

is limited and it resolves itself in many cases into custodial care with occupational, recreational and industrial therapies.

Thirty-five percent of the 34,000 patients in the nine state mental hospitals are over 60 years of age. Many of these will spend the remainder of their days in the hospitals. The seriousness of this problem can be realized by an analysis of the figures on first admissions to these hospitals during the last fiscal year. Over one-third (37.6%) of the 8,800 first admissions last year were over the age of 60, as shown by the following chart:

<i>First Admissions to Nine State Mental Hospitals</i>	
<i>Ages</i>	<i>Per Cent</i>
85 and over	3.40
80-84	5.53
75-79	7.38
70-74	6.95
65-69	7.69
60-64	6.94
Total over 60	37.69

Out of every 100 hundred admissions 37 are over sixty years of age, 23 are over seventy years of age, and 3 are over eighty-five years of age.

These figures indicate the need of a careful analysis and study of the elderly persons before commitment to a mental hospital. Wherever possible the individual should be given opportunities to make an adjustment in his own community and environment. Relatives should be encouraged to care for their elders even though they may have some mild changes associated with senility. At times, these patients will adjust very well in substitute homes. It might be well to point out to relatives that these aged are entitled to old age assistance benefits which would defray the cost of keeping them in their own home, or a substitute home. Recently, the Illinois Public Aid Commission has also been paying for medical expense that such patients may incur while receiving old age assistance.

George A. Wiltrakis, M.D.
Deputy Director

OBSTETRICIANS CERTIFY 236

The annual meeting of the American Board of obstetrics and gynecology was held in Chicago, Illinois, from May 8 to May 14, 1949, at which time 236 condidates were certified.

New bulletins, incorporating changes made at the recent meeting, are now available for distribution upon application and give details of all new regulations.

The next scheduled examination (Part I), written examination and review of case histories, for all candidates will be held in various cities of the United States and Canada on Friday, February 3, 1950. Application may be made until November 5, 1949. Application forms and Bulletins are sent upon request made to American Board of Obstetrics and Gynecology, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

CLINICS FOR CRIPPLED CHILDREN LISTED FOR SEPTEMBER

The University of Illinois Division of Services for Crippled Children will hold 18 clinics for physically handicapped children during September. Four rheumatic fever, two cerebral palsy and 12 general clinics. General clinics provide diagnostic orthopedic, pediatric, speech and hearing examinations.

During June, 649 children attended the general clinics while 52 attended rheumatic fever clinics and 27 attended those held for the cerebral palsied. Attendance at the special clinics is by invitation only.

These clinics are held by the Division in co-operation with local medical and health organizations. Clinicians who serve are private physicians who are certified Board members. Any private physician may refer or bring children to a convenient clinic for examination or consultative services.

- The September schedule is as follows:
- September 1 — Hinsdale, Hinsdale Sanitarium
 - September 7 — Rock Island (Cerebral Palsy), St. Anthony's Hospital
 - September 8 — Elmhurst (Rheumatic Fever), Elmhurst Community Hospital
 - September 8 — Springfield, St. John's Hospital
 - September 9 — Chicago Heights (Rheumatic Fever), St. James Hospital
 - September 9 — Clinton, Y.M.C.A.
 - September 13 — Peoria, St. Francis Hospital
 - September 13 — E. St. Louis, Christian Welfare Hospital

September 14 — Centralia, Franklin School
 September 20 — Golconda, American Legion Home
 September 20 — Quincy, Blessing Hospital
 September 21 — Sterling, Sterling Public Hospital
 September 22 — Rockford, St. Anthony's Hospital
 September 22 — Bloomington, St. Joseph's Hospital
 September 23 — Chicago Heights (Rheumatic Fever), St. James Hospital
 September 27 — Peoria, St. Francis Hospital
 September 27 — Effingham (Rheumatic Fever), American Legion Home
 September 28 — Springfield (Cerebral Palsy), St. John's Hospital
 September 28 — Alton, Alton Memorial Hospital

CHICAGO MEDICAL SOCIETY POSTGRADUATE COURSES

The Chicago Medical Society is offering two one-week postgraduate courses to physicians of the country from October 17th through October 29th. The subjects chosen for presentation were requested by the men taking the courses during 1947 and 1948.

The Committee on Postgraduate Medical Education of the Chicago Medical Society has made every effort to secure a faculty composed of outstanding teachers and authorities in the two subjects, and is pleased to announce that the following men have consented to serve on the faculty:

OCTOBER 17 — 22, 1949 — *CARDIO-RENAL AND PERIPHERAL VASCULAR DISEASES*. A complete list of the faculty will be available later; it will include among others, the following teachers:
 Wright Adams — University of Chicago
 Benjamin M. Baker — Johns Hopkins University
 Emmet Bay — University of Chicago
 Alfred Blalock — Johns Hopkins University
 Geza deTakats — University of Illinois
 George K. Fenn — Northwestern University Medical School
 Edmond F. Foley — University of Illinois
 Stanley Gibson — Northwestern University Medical School
 Robert E. Gross — Harvard University
 Laurence E. Hines — Northwestern University Medical School
 Louis N. Katz — Michael Reese Hospital
 Chauncey C. Maher — Northwestern University Medical School

Gilbert Marquardt — Northwestern University Medical School
 Hugh McCulloch — LaRabida Sanitarium, Chicago
 George R. Meneely — Veterans Adm. Hospital, Nashville, Tennessee
 John P. Merrill — Harvard University
 Ovid O. Meyer — University of Wisconsin
 Francis D. Murphy — Marquette University
 Eric Oldberg — University of Illinois
 Harris B. Shumacker — University of Indiana
 Albert VanderKloot — University of Illinois
 George E. Wakerlin — University of Illinois
 Irving Sherwood Wright — Cornell University, New York

OCTOBER 24 — 29, 1949 — *OBSTETRICS, ENDOCRINE-GYNECOLOGY AND STERILITY*. A complete list of the faculty will be available later; it will include among others, the following teachers:

Frank E. Adair — Cornell University
 Edward D. Allen — University of Illinois (Rush)
 Joseph L. Baer, Rush Prof. Emeritus OG, University of Illinois
 Charles Lee Buxton — Columbia Presbyterian Medical Center, New York
 Ralph E. Campbell — University of Wisconsin
 I. Davidsohn — University of Illinois
 M. Edward Davis — University of Chicago
 William J. Dieckman — University of Chicago
 Earl T. Engle — Columbia University, New York
 Frederick H. Falls — University of Illinois
 Charles Edwin Galloway — Northwestern University
 E. C. Hamblen — Div. of Endocrinology, Dept. of Obstetrics, Duke University
 John W. Harris — University of Wisconsin
 H. Close Hesseltine — University of Chicago
 Robert S. Hotchkiss — New York University
 Louis R. Limarzi — University of Illinois
 Armand J. Mauzey — University of Illinois
 Carl R. Moore — University of Chicago
 Warren O. Nelson — State University of Iowa
 John Rock — Harvard University
 Herbert E. Schmitz — Loyola University, Chicago
 Fred A. Simmons — Harvard University
 Franklin F. Snyder — Boston Lying-In Hospital, Boston
 Henry H. Turner — University of Tennessee
 J. Robert Willson — Temple University
 John R. Wolff — University of Illinois

Each course is limited to one hundred and the tuition fee for each week is \$50.00. The work will be given at Thorne Hall, Lake Shore Drive and Superior Street, on the campus of Northwestern University Medical School.

Those interested in attending one or both courses may secure additional information by writing Doctor Willard O. Thompson, Chairman, Committee on Postgraduate Medical Education, Chicago Medical Society, 30 North Michigan Avenue, Chicago 2, Illinois.

BLOOD BANK ASS'N TO MEET IN SEATTLE

The Second Annual Meeting of the American Association of Blood Banks will convene in Seattle, Washington, at the Olympic Hotel November 3, 4, 5, 1949. An excellent program is being arranged which will be of interest to both scientific and administrative personnel of blood banks and hospitals. For further information contact the Office of the Secretary, 3301 Junius Street, Dallas 1, Texas.

I.C.S. TO MEET IN ATLANTIC CITY

The International College of Surgeons, United States Chapter, will hold its fourteenth Annual Assembly and Convocation in Atlantic City, New Jersey, November 7, 8, 9, 10, 11, 12, 1949.

Arnold S. Jackson, M.D., Secretary of the United States Chapter, has reported that over 500 surgeons will be received as Associates and Fellows of the International College at the Convocation.

All doctors of medicine interested in surgery and its advancement are invited to attend, and can obtain a program upon request to Arnold S. Jackson, M.D., Secretary, Jackson Clinic, Madison 4, Wisconsin. For hotel reservations, contact E. D. Parrish, Haddon Hall, Atlantic City, New Jersey.

MISSISSIPPI VALLEY MEDICAL SOCIETY MEETS AT ST. LOUIS

The 14th Annual Meeting, Mississippi Valley Medical Society, will be held at the Jefferson Hotel, St. Louis, Sept. 28, 29, 30, under the Presidency of Dr. Alphonse McMahon, Associate Prof. of Medicine, St. Louis University. Clinical

teachers from the leading medical schools will conduct this post-graduate assembly whose program is planned to appeal to general practitioners.

No registration fee will be charged and every ethical physician is cordially invited to attend. The American Medical Writers' Ass'n. will hold their annual meeting at the hotel on Sept. 28 and the Missouri Chapter of the American Academy of General Practice on Sept. 30. Programs of all the meetings may be obtained from Harold Swanberg, M.D., Secretary, M.V.M.S. and A.M.W.A., 209-224 W. C. U. Bldg., Quincy, Ill.

THE AMERICAN CONGRESS OF PHYSICAL MEDICINE

Will hold its twenty-seventh annual scientific and clinical session Sept. 6, 7, 8, 9 and 10, 1949 inclusive, at the Netherland Plaza Hotel, Cincinnati, Ohio. Scientific and clinical sessions will be given on the days of Sept. 6, 7, 8, 9 and 10, 1949. All sessions will be open to members of the medical profession in good standing with the American Medical Association. In addition to the scientific sessions, the annual instruction courses will be held Sept. 6, 7, 8 and 9. These courses will be offered in two groups. One set of ten lectures will consist of basic subjects and attendance will be limited to physicians. One set of ten lectures will be more general in character and will be open to physicians as well as to physical therapy technicians who are registered with the American Registry of Physical Therapy Technicians. Full information may be obtained by writing to the American Congress of Physical Medicine, 30 North Michigan Avenue, Chicago 2, Illinois.

The 1949 Annual Meeting

PALMER HOUSE, CHICAGO

MAY 16, 17, 18

With a total registration of 3607, the 1949 Annual Meeting was one of the most successful in the Society's history. General Assemblies and Section meetings were well attended, and for the second year three full days of motion pictures were presented under the direction of Coye C. Mason.

The 1950 Annual Meeting will be held in Springfield, the first to be held outside Chicago since 1942.

(Right) M. M. Hoeltgen and Walter C. Bornemeir who served as Chairman and Vice-Chairman of the Committee on Arrangements for the Annual Meeting. The latter was elected to the Council as a representative from the 3rd District.

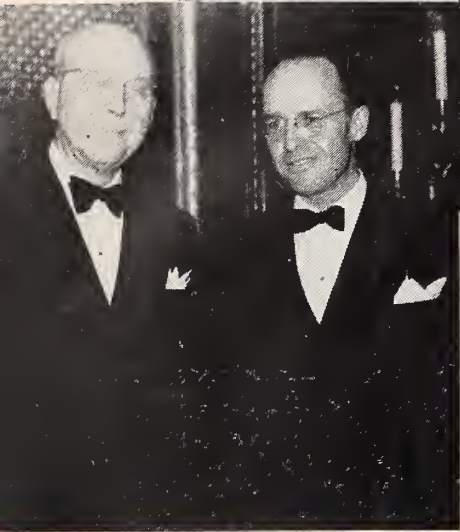


(Above) Harry M. Hedge, President-Elect, has just escorted Walter Stevenson, new President, to the platform to receive congratulations from Percy E. Hopkins, retiring President.



(Left) Edward L. Turner, Dean and Professor of Medicine, University of Washington, Seattle, Washington, who delivered the Oration in Medicine. His subject was "A Dean Looks at Medical Education and Practice."

Dinners Luncheons



(Above) Irving H. Neece, who served as Toastmaster for the Annual Dinner, and William Alan Richardson, Editor of *Medical Economics*, principal speaker for the evening. He told of medicine in Great Britain and the problems besetting doctors there.



(Above—right) Miss Margaret Maloney, Mrs. Robert S. Berghoff, Robert S. Berghoff at the Annual Dinner. Miss Maloney has handled secretarial duties for scores of Society meetings and programs.



(Below) Mrs. Robert E. Dunlevy, Pekin, Mrs. A. T. Kwedar, Springfield, and Mrs. George Carlin, Joliet, at the Woman's Auxiliary Luncheon.



(Above) At the Woman's Auxiliary luncheon honoring Past Presidents of the organization a photographer caught Mrs. C. E. Sibilsky, Peoria, President-Elect, Mrs. E. M. Egan, Chicago, President, and Mrs. L. N. Hamm, Lincoln, retiring President in a happy mood.



(Right) Mrs. Warren Young and Mrs. Nicholas Dykstra, both of Chicago, at Auxiliary meeting in the LaSalle Hotel.



THE BEER PARTY



The Beer Party (known formally as The Fellowship Hour) was off to a good start with the arrival of the Barbershop Quartet. They proved wonderful entertainers and the interest was heightened by the fact that the leader in the top hat was none other than Wade C. Harker, a member of our Council.



(Above) General view of the party.
(Left) C. K. Jones, Chicago, congratulates Albert Mickow, Chicago, on the success of the affair. This was the second year that the latter had charge, and everyone voted it the best yet. Dr. Mickow also served as Chairman of the Reception Committee.



(Left) E. B. Montgomery of Quincy can look back on more years of practice than any other Illinois physician. He has chalked up more than 71 years of service and is still active in his community. Mather Pfeiffenberger, Alton, is asking how he does it.

THE SCIENTIFIC EXHIBITS



The average visitor doesn't see the bustling activity when the exhibits are set up the day before the opening. Above, B. M. Gazul, E. H. Fell, Hans Popper, Maurice Lev, Wm. Mavrelis, J. A. Campbell, C. B. Davis Jr., Raul Casus, and Hans Hartenstein are assembling "The Congenital Heart in Clinical Medicine." The exhibit was awarded a Bronze Medal.

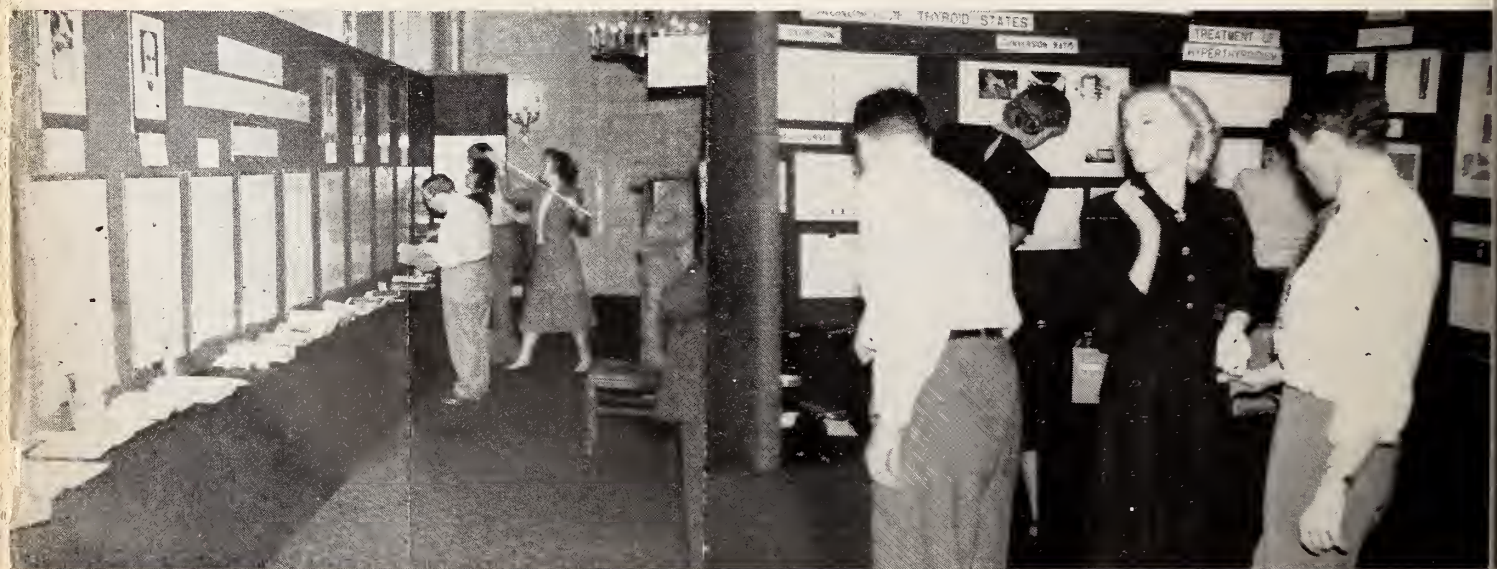


David M. Cohen and Milton Goldin take time out from setting up their exhibit "Superficial Fungus Infections — Methods of Diagnosis" to talk to Coye C. Mason (right) who, as Chairman of Scientific Exhibits, directed the big task.

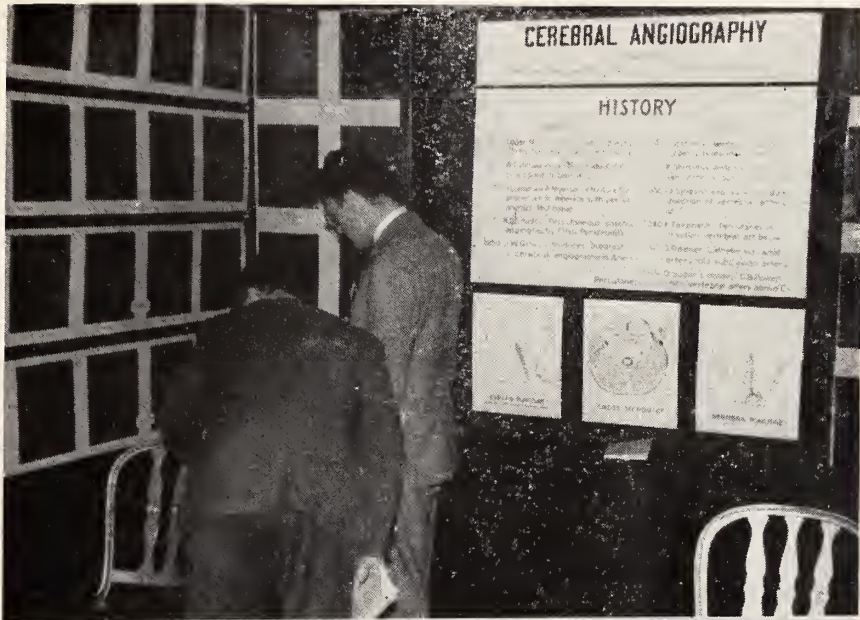
"The Dermatological Album" prepared by David B. Omens and Harold D. Omens of the Rush Medical College, Division of the University of Illinois was winner of a Silver Medal in the Teaching Division. The exhibits were conveniently arranged and very well lighted. The quality of the work made judging extremely difficult.

(Below) Samuel J. Zakon of Northwestern University Medical School directs the assembly of "The Physician's Creed — *Religio Medici*." He was given a Bronze Medal for his work.

(Below) D. E. Clark, R. H. Moe, and E. E. Adams of the University of Chicago are setting up the exhibit "Radioactive Iodine — Its Use in Diagnosis and Therapy," a winner of a Bronze Medal.



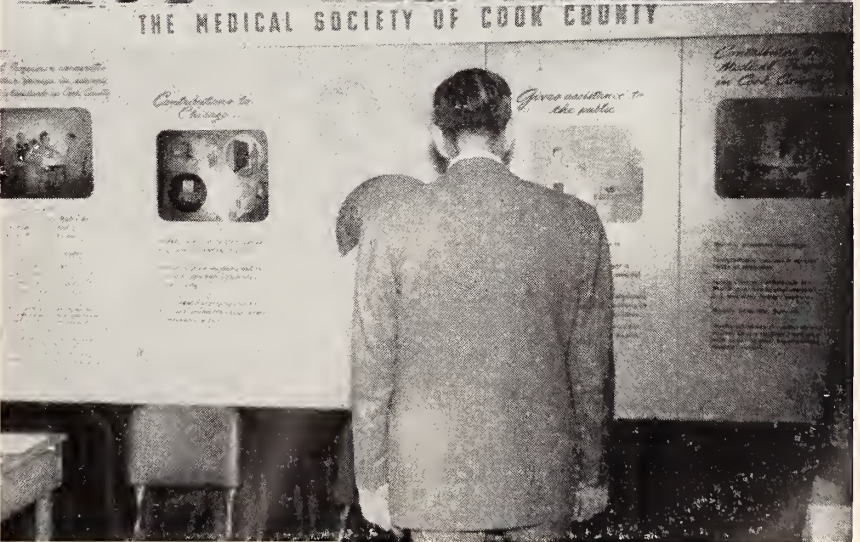
"Cerebral Angiography" exhibited by Oscar Sugar of the Department of Neurology and Neurosurgery, University of Illinois, College of Medicine was awarded the Gold Medal for Original Work.



Our own Society had two exhibits. This one was prepared by the Committee on Medical History, James H. Hutton, Chairman. The old photos, case books, and other data were of real interest and served to focus attention on the valuable work this committee is performing.



The exhibit of the Chicago Medical Society outlined the many public services the physician performs. That's Frank Deneen of Bloomington giving it deserved attention.



ORIGINAL ARTICLES



Allergic Retrobulbar Neuritis

Thomas D. Allen, M.D. and Otto F. Seidemann, M.D.
Chicago

In recent years the trend of the ophthalmologist to associate allergy and ocular diseases has become of increasing significance. Many writers have cited various cases they have seen in which the removal of the allergic factor resulted in cessation of the disease. Many of us have seen the allergic manifestations of penicillin eye drops and of other ocular medication. We have seen a case (D-5167) in our office of a young man who has had periodic headaches, nausea, and marked ocular discomfort. After ophthalmological examination showed no significant findings a series of allergy tests were made and it was found this patient was sensitive to eggs. He stopped eating eggs, per se, and all his symptoms subsided.

Although allergy seems to be a recently studied etiological factor in ocular diseases the possibility of allergic reactions occurring in the eye was first demonstrated by Nicolle and Abt (1908), who found that if animals were sensitized by

an intraperitoneal injection of serum, subsequent intraocular injection of the serum produced a violent local inflammation. In 1909 Sattler found that if the preliminary injection were made into the eye, a slight reaction followed, while re-injection at a later date produced a peculiar violent response. Wessely in 1911 supplemented these classical experiments and showed that if an intra-corneal injection of protein were made and the subsequent traumatic chemical keratitis produced by the injection were allowed to subside, a later injection of the cornea of the other eye produced a violent interstitial keratitis in the originally injected eye, clinically and pathologically identical with that due to syphilis. In 1910 Krusuis, 1911 Kummel, 1913 Dodd and Rados, 1914 Fuchs and Meller and others proved conclusively that the tissue of the eye can readily be sensitized both locally or as a part of a general sensitization, and that they are capable of violent allergic responses. In 1929-1930 Seegal and Seegal showed that desensitization could be achieved by repeated intravenous injections of the antigen. The same considerations are applied to bacterial products.

Presented before Section on Eye, Ear, Nose and Throat, Ill. State Med. Soc., 107th Annual Meeting, Chicago, May 12-14, 1947.

Duggan in 1946 states that, "allergy of the eye is, of necessity, a subdivision of allergy of the body as a whole." In 1941 Bothman stated that, "in the allergic attack an antigen-antibody reaction occurs and frees a histamine-like substance which leads to capillary dilatation, increased permeability of vessel walls and an exudation of serum which contains toxic substances." It would therefore seem that any anti-histamine substance would be indicated to relieve the allergic reaction, because histamine, a chemical substance of known composition, has a pronounced effect on capillary endothelium and smooth muscle which is demonstrated in the allergic attack.

This discussion will be a preliminary report of a case history of retrobulbar neuritis due to allergy. As is known from our text books, the alleged causes of retrobulbar neuritis include allergy, focal infection, pregnancy, lactation, endocrine disorders, and more commonly, multiple sclerosis. Carrol in 1940 stated that "when a cure has been discovered for multiple sclerosis, a cure will have been found for retrobulbar neuritis in many cases." And vice versa, the same could hold true that if a cure for retrobulbar neuritis is found, a cure for some cases of multiple sclerosis may be found.

We are all familiar with the clinical findings and symptomatology of the types of retrobulbar neuritis. It might be well to review briefly these types which are divided into an acute, so-called symptomatic form and a chronic, idiopathic form. The latter is the condition which we have attributed to a primary optic nerve retinal lesion. This chronic form of the disease is rare and is more frequently bilateral. It is slow in onset, may persist for many months, and as a rule, has a more serious prognosis in that marked visual deterioration is more commonly permanent.

In Duggan's paper, November 1946, he reviews several cases of retrobulbar neuritis reported by various writers in which the etiological factors varied from a post-partum episode to the patient running about 1/5 of a mile. All these cases seemed to respond to vasodilator therapy and showed markedly improved vision. The report of this case history will show that at no time did the patient have any marked subnormal vision.

Case history: (D-1917) Mrs. R. W., age 63, was first seen in 1939. Her only complaint at that time was a slight foggy vision, more in the left eye

than in the right, associated with difficulty in keeping her eyes focused on her sewing. One year prior to this she said she had had arthritis which was "cured" after she had a "bad tooth" extracted. Ophthalmic examinations at this time revealed a visual acuity of 20/20 in each eye, normal external examination, round pupils which reacted sluggishly to light and in accommodation, fine floating vitreous opacities in the right eye with coarser vitreous opacities in the left, and normal fundi. The refractive error was a low compound hyperopic astigmatism with presbyopia, and spectacles were ordered.

Patient was next seen in March, 1940 at which time she complained of some discomfort in the left eye, which she described as a pulling and twitching sensation in the lower left lid. Ophthalmic examination did not reveal any new findings and a slight change in her glasses was made.

In November, 1942, she complained that her "eyes smart and ache after about 1/2 hours of sewing." At irregular intervals during the past 4 to 5 days she had had a sharp pain in the left eye which increased with movement, or pressure, upon the left eyeball. Associated with this was a marked soreness of the left side of the scalp which was so bad at times she couldn't brush her hair. Now the discomfort and stiffness in the lower lid and inner canthal region was almost constant. At this time she admitted getting "hives" from strawberries and tomatoes. She had a complete otolaryngological examination, dental, including x-rays of all teeth, complete physical, and a series of allergy tests. All findings were normal except for positive allergy reaction to strawberries and tomatoes. Ophthalmological findings at this time were also normal. Patient was placed on vitamin B therapy and a proper diet was prescribed.

Following this, she was seen on several routine visits from 1942 until January 1947, at which time she came to the office complaining of a severe pain in the left eyeball, which increased on rotation of the eyeball and on pressure upon it, with marked soreness of the left side of the scalp. Her vision was very blurred and she had the feeling that her left lower lid was turned out. Uncorrected visual acuity at this time was 20/50 in the right eye and 20/70 in the left, correctable to 20/30 in each eye. Media and fundus findings remained unchanged from previous examinations and central fields taken were negative. Since the patient was very tired and uncomfortable during the examination, it was thought best to have her return at a later date, to repeat the central field studies.

She returned to the office on February 3, 1947. Her visual acuity was found to be correctable in each eye to 20/20 and the patient seemed to be quite comfortable, although the pain in the left eyeball was still present. The media and fundi remained unchanged, but the central fields showed a paracentral relative scotoma for colors. (Figure 1.) At this time a displacement treatment of the posterior nares was done and a few tiny particles of pus were placed on a slide

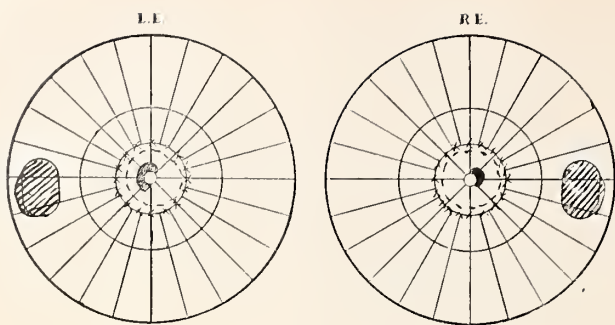


Figure 1. Target — XXX — Red, — — — Green, Size 5 mm., Distance 2000 mm.

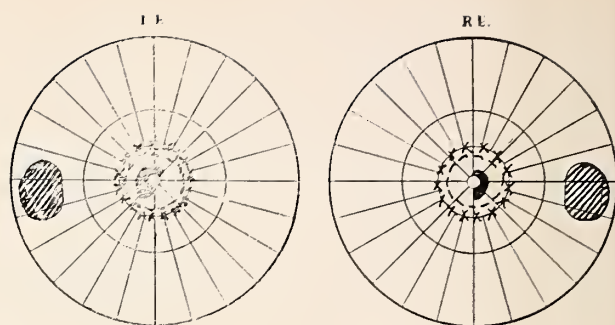


Figure 2. Target — XXX — Red, — — — Green, Size 5 mm., Distance 2000 mm.

to stain for eosinophils. Many eosinophils were found in the smear. The patient was placed on pyribenzamine therapy (100 mg. per day) and proper diet, and told to return in one month.

On March 6, 1947, she returned and said she had had a severe headache and stabbing pain in the left eyeball at 3:00 A.M. which was so severe it had awakened her during her sleep. She took 10 gr. of aspirin and 50 mg. of pyribenzamine at that time and in one hour was able to return to sleep.

A review of her symptoms since the last visit revealed she had been seen by an allergist who found that in addition to strawberries and tomatoes there was a positive reaction to bananas, camel and cat's hair. She also stated that shortly after taking a pyribenzamine tablet her vision seemed to be sharpened. Since she has been under pyribenzamine therapy she has had only the above mentioned episode of headache and the one attack of left eyeball pain.

On April 10, 1947, there was a repetition of all the previous complaints of headache, pain in the left globe, etc. It was very discouraging to hear this and a further investigation into the patient's activities since the last visit was made. It was found that the patient was being seen by an allergist since her last visit; he had stopped the pyribenzamine therapy because he felt it would interfere with the allergy tests. The allergist now found the patient gave a three plus reaction to staphylococcus.

Visual acuity at this visit was correctable to 20/25 in each eye and the media and fundi remained unchanged. Peripheral fields were normal, but repeat central fields revealed a relative paracentral scotoma for red and green in the right eye. The left eye showed an absolute paracentral scotoma for red, and a relative scotoma for green. (Figure 2.)

She was instructed as to the importance of her diet, avoidance of her allergens, and continuation of the pyribenzamine therapy.

On April 28, 1947 she was extremely happy about her general condition and was especially emphatic about the clearness in her vision. She no longer experienced the pain in her left eyeball and was free of any discomfort in the left side of her head. Repeated central fields now revealed a very small paracentral scotoma for red only. (Figure 3.) There were no other findings.

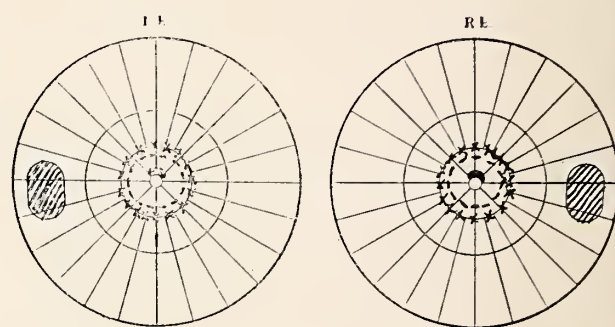


Figure 3. Target — XXX — Red, — — — Green, Size 5 mm., Distance 2000 mm.

SUMMARY AND COMMENT

A case report was presented of a patient with retrobulbar neuritis, manifested by the findings of relative and absolute paracentral scotomas for colors. Because of the history, allergy was suspected and a series of allergy tests were done. The patient was found to be sensitive to tomatoes, strawberries, bananas, camel's hair, cat's hair, and staphylococcus. On a regime of avoiding her allergens and maintaining pyribenzamine therapy, there was a marked subjective improvement in her ocular symptoms with a gradual diminution of the paracentral scotomas. It was also demonstrated that for a period while the patient was undergoing a series of allergy tests, pyribenzamine was discontinued, and there was an exacerbation of the ocular symptoms and findings.

We feel, as other writers do, that we do not have a highly allergic patient, with retrobulbar neuritis, but that we have a patient with retrobulbar neuritis in which allergy plays a definite role in the etiology.

We will continue to investigate this case further, and a subsequent report will be submitted at a later date.

REFERENCES

1. Bothman, L. — "Clinical Manifestations of Allergy in Ophthalmology." "Year Book of Eye, Ear, Nose and Throat" — (Chicago) (The Year Book Pub. Inc. 1941) p.p. 7-58.
2. Bothman, L. — "Allergic Iritis" — Year Book of E.E.N.T. (Chicago — The Year Book, publ. in 1945) pp. 7-19.
3. Duggan, W. F. — "Vascular Basis of Allergy of the Eye and its Adnexia." Archives of Ophthalmology — Nov. 1946 — pp. 551-611.
4. Carroll, F. D. — "Nutritional Retrobulbar Neuritis" — American Journal of Ophthalmology. Feb. 1947 — pp. 172-176.
5. Whitbourne, D. — "Nutritional Retrobulbar Neuritis in Children" — American Journal of Ophthalmology — Feb. 1947 — pp. 169-171.

DISCUSSION 1

Dr. Louis Bothman, Chicago: I was pleased to hear this paper because retrobulbar neuritis is the least common of all allergic diseases of the eye and its adnexia. Optic neuritis is seen much more frequently. In fact, the same patient may show retrobulbar involvement in one attack and optic neuritis in another. Such a case was the one reported before this section in 1941 by Drs. Hayden and Cushman (Ill. Med. Jour. 80: Dec. 1941). We have seen two such cases and only one of retrobulbar neuritis *per se*.

The allergic type must be differentiated most frequently from alcoholic and diabetic neuritis and multiple sclerosis. The alcoholic and diabetic types are most often bilateral, although we have seen unilateral cases. So-called multiple sclerosis is not uncommon and we believe that many cases so diagnosed are really due to allergies. We have seen several cases of external rectus paresis and paralysis, with and without optic nerve involvement, which cleared up and remained quiet for more than ten years. These are definitely not multiple sclerosis, which is a degenerative disease ending in bitemporal or even complete optic atrophy.

Another condition which may easily be confused with retrobulbar neuritis is angiospastic central retinitis and macular edema without hemorrhages. In these cases there is usually only a relative scotoma and if the macula is studied with the binocular ophthalmoscope the retinal changes may be seen.

Transient retrobulbar neuritis may accompany attacks of migraine. Many cases clear very quickly, others persist for hours or days.

Good results from treatment of allergic attacks are often disappointing, and treatment must be prolonged. It consists of avoidance of exposure to known allergens and desensitization when this is not possible. The authors were fortunate in getting a quick response in their case.

I have been interested in allergies of the eye for the past fifteen years. My interest was aroused chiefly because there appeared to be no explanation for re-

current attacks of iritis after all foci of infection had been removed, and because of the seasonal incidence of the attacks. These cases were either due to allergies or occurred in highly allergic patients. We believe they were due to allergy because we have since gathered quite a number of cases which point in that direction.

We are all familiar with drug allergies, the most common of which is atropine dermatitis and conjunctivitis. We can all recall cases of severe and persistent conjunctivitis which were diagnosed and treated as trachoma, but which never developed pannus; some of the more severe cases showed a few corneal infiltrates, but never a pannus. We have all seen phlyctenular keratitis in young adults who showed a negative response to tuberculin tests and to physical examination. Because some of these occurred in patients with known allergies, we had them studied and found that under proper dietary management and desensitization, the attacks were decreased and a few ceased entirely.

We reasoned that, if allergens could cause conjunctivitis and keratitis, they could cause other eye involvement and in cases where all other methods failed to disclose an etiology, we had these patients tested by an allergist; we found many of them highly allergic.

There is apparently no structure of the eye or its nervous pathways immune to allergic attacks. Time does not permit a dissertation on the subject. We must be satisfied at this time to urge you, when confronted with an inflammatory lesion of the eye for which no etiologic factor can be discovered by painstaking physical and laboratory examination, to study the patient from the allergic point of view. Your efforts will often be rewarded. Osler has said — "Know syphilis and you know medicine." I should like to paraphrase this by saying — "Recognize the allergic nature of eye disease and you will know ophthalmology."

DISCUSSION 2

Dr. Thomas D. Allen, Chicago: I think this paper speaks for itself, and I want to congratulate Dr. Seidelmann for working it up in such a complete manner.

DISCUSSION 3

Dr. Otto F. Seidelmann, Chicago (closing): I should like to thank Dr. Bothman for his instructional discussion of this paper. Because pyribenzamine is one of the latest antihistaminic drugs which shows less side reactions, we chose to use it in this given case. Dr. Bothman stated that "the recovery period on our patient was quite rapid," but whether pyribenzamine alone, or the abstinence of the patient from her allergens, produced the rapid improvement is a problem still to be investigated. We feel certain that in the future allergy will be found as a frequent etiological factor in retrobulbar neuritis.

The Surgical Aspects of Diverticulosis and Diverticulitis

John L. Keeley, M.D.
Chicago

It is commonly known that diverticulosis may involve any portion of the gastro-intestinal tract but this presentation concerns only diverticulosis and diverticulitis and its complications in the large bowel.

Diverticulosis, the presence of sac-like out pouchings of the colon, has its highest incidence after the age of forty although Bearn¹ has reported a series of patients with diverticulosis in their twenties and one was age twelve. The incidence is estimated at 5 per cent based on autopsy figures² whereas from 3 to 10 per cent of patients examined by barium enema show diverticulosis^{3, 4}. The distribution of these diverticulae is of some significance because it explains the preponderance of left sided abdominal symptoms due to diverticulitis and its complications. Thus in a large series, the sigmoid alone was involved in 56 per cent and the sigmoid and the descending colon were involved in 23 per cent⁵. Thus in 79 per cent of patients having diverticulae, they were located in either the sigmoid or the sigmoid and descending colon, and in the remaining 21 per cent the diverticulae were in the left half of the colon in 9.4 per cent, the entire colon in 8.3 per cent, the flexures, cecum and ascending colon and the transverse colon in from 1 to .6 per cent. (See Table 1)

In the diagnosis of uncomplicated diverticulosis, sigmoidoscopy has proven to be of little aid, 14.5 per cent in a large series of cases being a high incidence of positive findings⁶. It is possible to see the opening into a diverticulum through the sigmoidoscope although this was noted by Willard and Bockus⁷ in only one instance over a ten year period. In the majority

of uncomplicated cases no abnormality is found in this type of examination.

The mere presence of diverticulae of the colon, diverticulosis, is ordinarily unassociated with symptoms. However, patients with diverticulae in whom no clear-cut episodes of complications have been noted may complain of diarrhea, constipation, pain or distress, or flatulence^{4, 7}. The question arises whether these are symptoms of diverticulosis or whether there has been some complicating factor such as inflammation of a mild degree. Analysis of these symptoms may be somewhat difficult because many times the exact meaning of these complaints varies considerably from one patient to another.

The detection of diverticulae, however, as an incidental finding in routine examination is of value. Many times in a patient with some acute abdominal disturbance, the diagnosis might prove to be puzzling if it were not known that previous x-ray studies had shown the presence of diverticulae and raised the question of diverticulitis or some complication thereof.

DIVERTICULITIS WITH SPASM

Diverticulitis with spasm is undoubtedly the most common complication of diverticulosis. Diverticulitis with spasm attacks 10 to 20 per cent of patients with diverticulosis⁸. Males are effected twice as frequently as females⁹, the attacks occur in the middle age or older group, and characteristically in corpulent individuals with sedentary habits. The onset is rather sudden but not as sudden as the onset of symptoms in patients with ruptured peptic ulcer. The pain is of crampy nature and is located in the lower portion of the abdomen. There may be loose stools followed by constipation, distention, nausea and vomiting. Signs of inflammation are present in the left lower quadrant and/or in the suprapubic area. There is moderate to marked tenderness with some local muscle guard. Peri-

From the Department of Surgery, Stritch School of Medicine, Loyola University, Division of Surgery, Mercy Hospital.

Presented before the annual meeting, Illinois State Medical Society, May 10-12, 1948.

TABLE 1

Distribution of Diverticulæ Based on Figures of Brown and Marckley (5)

Sigmoid alone	56%	} 79%
Sigmoid & Desc. Colon	23%	
Left half	9.4%	} 21%
Entire colon	8.3%	
Flexures	1 %	
Caecum & Asc. Colon	1 %	
Transverse	.6%	

staltic sounds are usually present and upon rectal examination very frequently one finds tenderness in the midline or to the left. Fever usually occurs. A level of 101°F. to 102°F. may be reached. Leukocytosis may vary from 9,000 to 18,000. So frequently are the findings to the left and so closely do they resemble, except for the acuteness of the onset, an attack of appendicitis that this disturbance is often called "left-sided appendicitis."

The treatment of diverticulitis with spasm includes measures to decrease spasm and to discourage peristalsis. Bed rest, heat to the abdomen, fluids intravenously or in the form of a liquid diet, and analgesics or antispasmodics are in order. Because one never knows how severe the infection is going to be in these cases, it is well to institute some plan of chemotherapy and antibiotics. These measures may be discontinued when they are no longer needed. Diverticulitis with spasm runs a rather characteristic course and subsides in three to four days. The recovery is often associated with the passage of flatus and loose stools, a drop in white blood count and subsidence of the fever. (See Figure 1).

COMPLICATIONS OF DIVERTICULITIS

The complications of diverticulitis occur in 15 to 25 per cent of the patients with inflammatory changes with diverticulæ. The more common complications include perforation, sinus or fistula formation and obstruction. Rarely is there association with other diseases such as actinomycosis, tuberculosis, and carcinoma. Less common complications are pylephlebitis where the inflamed diverticulæ has subsequently infected radicals of the portal system and carried infectious emboli to the liver. An inflamed

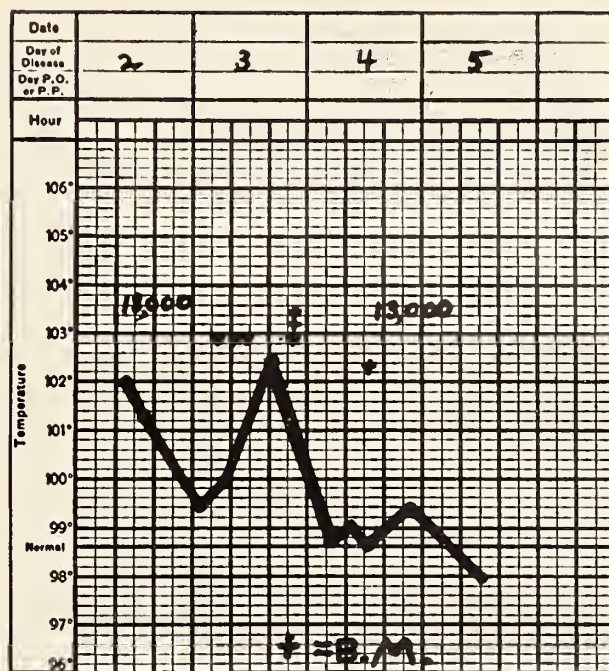


Figure 1.—This chart shows the range of fever and leukocytosis and number of bowel movements accompanying the subsidence of acute diverticulitis in an illustrative case.

diverticula may constitute a focus of chronic sepsis so that a search for such basis of chronic infection should include a study of the colon. Diverticulitis is associated with carcinoma in from 1.5 to 8 per cent of cases⁸ but there is no substantial evidence to show that the carcinoma is a result of the diverticulitis. It is generally regarded as a coincidental process.

PERFORATION OF A DIVERTICULUM

The perforation of one or more diverticuli is usually preceded by peridiverticulitis and the formation of limiting adhesions composed of coagulated exudate from the inflamed serous surfaces. This usually results in the formation of a local inflammatory process which may be absorbed or it may lead to an abscess which may likewise undergo absorption. (Figure 2) If the abscess persists, it may drain spontaneously into another structure leading to the formation of a fistula, or it may constitute an abdominal abscess which necessitates draining. When the abscess is incised and drainage through the skin is provided, it is similar to the incision and drainage of a perineal abscess in that the stage is set for fistula formation. Rarely is there free spontaneous perforation into an unprepared peritoneal cavity. Hayden³ reports it in 3 of 140 cases of diverticulitis. If this should occur, there is the clinical picture of a prostrating



Figure 2a.—Barium enema administered on the tenth day of illness followed left lower quadrant symptoms. Barium has passed through the perforated diverticulum into a paracolic abscess cavity. Patient treated conservatively.



Figure 2b.—Barium enema administered eight months later. Perforation sealed off at level of bowel wall. Diverticuli still present.

abdominal disaster characterized by the abdominal findings of a severe inflammatory reaction, pneumoperitoneum and the signs and symptoms of a spreading peritonitis. The management of a peridiverticular abscess is quite similar to that of an appendiceal abscess, namely, that conservative measures should be employed until continued spiking fever, leukocytosis, and local signs of inflammation indicate that the abscess is not being absorbed or subsiding. In that event, drainage to the outside is indicated and as a rule, nothing else should be done at this time. It is well to point out that when an abscess of this kind is drained, just as in the drainage of an appendiceal abscess, a search should be made for fecaliths which may have started the inflammation by ulceration of the mucosa of the diverticulum and, upon perforation of the diverticulum, escaped into the surrounding area. If these fecaliths are not removed at operation or extruded later, a chronic draining sinus may persist from this cause alone.

FISTULA FORMATION

With the incision of a peridiverticular abscess or its spontaneous perforation through the skin,

a cutaneous fistula results. As a general rule, this involves the abdominal wall, whether it is incised and drained, or drains spontaneously, but a fistula into other areas is not uncommon. Thus an inflamed diverticula may become adherent to the bladder and lead to formation of a vesico-enteric fistula. This is five times as common in males as in females because the broad ligament and the uterus form a barrier between the colon and the bladder¹¹. Fistula formation involving the rectum (sigmoid-rectal fistula), the urethra (urethra-colic fistula), and the vagina (recto-vaginal fistula) are rather uncommon. The retro-peritoneal perforation of an inflamed diverticula or a peridiverticular abscess may lead to a condition simulating perinephric or psoas abscess or even urinary extravasation. Occasionally, chronic draining sinuses in the perineum or overlying the lower portions of the spine may lead to the erroneous diagnosis of ano-rectal fistula or pilonidal sinus¹¹.

DIVERTICULITIS WITH OBSTRUCTION

The obstruction associated with diverticulitis may involve the site of the diverticulitis, that is in the colon, or it may involve the small bowel

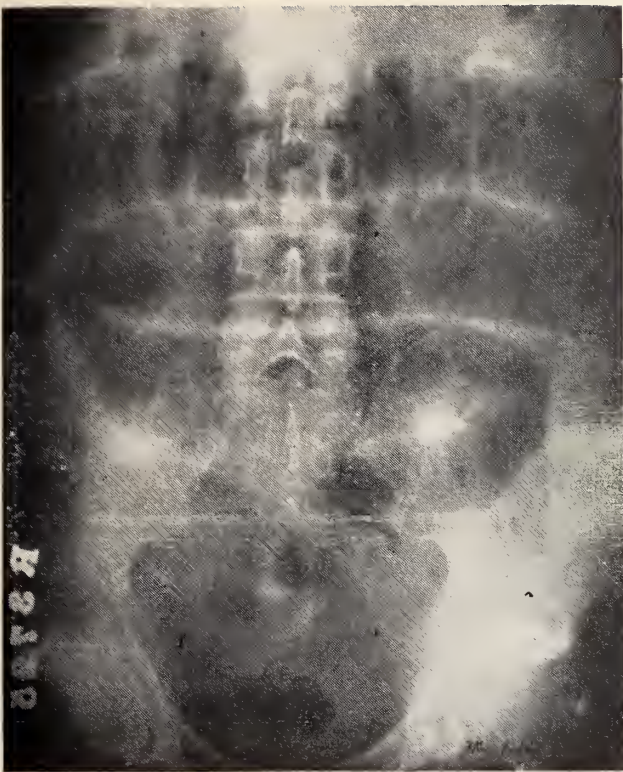


Figure 3a.—Flat film of the abdomen showing small bowel obstruction secondary to acute diverticulitis. The patient was treated conservatively. The small bowel was deflated by a Miller-Abbott tube.

secondarily. It must be remembered that the causes of obstruction in association with diverticulitis may be simply spasm of the involved portion of the bowel, the sudden increase in the amount of edema in the inflamed area, the presence of a residual inflammatory mass after the acute process subsides or the deposition of sufficient scar tissue which if followed by contraction may cause an unrelenting obstruction. The involvement of the small bowel may be secondary to adhesions of the serosal surface of the small bowel to the inflamed diverticula or to the abscess wall (Figure 3). In any event, the obstruction due to diverticulitis in the acute stage should be treated by conservative measures because the edema and swelling will decrease as the inflammatory process subsides. After the acute inflammatory process subsides, reevaluation of the situation is in order and time is available for satisfactory preparation of the patient for whatever surgery may be indicated.

**SURGICAL PROCEDURES IN THE
MANAGEMENT OF THE COMPLICATIONS OF DIVERTICULITIS**

Closure of a perforated diverticulum is not commonly done. As a rule, the bowel wall ad-

jacent to an inflamed diverticulum is thickened, hyperemic, edematous, friable and does not hold sutures well. Should a perforation of this kind be disclosed at operation, simple drainage in order to carry any contamination to the outside or to promote the formation of a fistula which may subsequently heal, is to be recommended. Occasionally, the involved portion of the bowel may be exteriorized. This is most often feasible in the sigmoid where the mesosigmoid may permit exteriorization without an extensive operative procedure or extensive dissection exposing uncontaminated retro-peritoneal spaces to infection. The decision to exteriorize the bowel, furthermore, may be predicated upon the possibility of ultimate resection of the colon as judged by the amount of inflammatory reaction, the presence of chronic inflammation, scar tissue, etc. The incision and drainage of an abscess has been dealt with earlier in this paper.

The closure of fistulae is often quite difficult. The procedure of dissecting out a fistulus tract to its connection to the large bowel, excising the tract and closing over the fistula primarily, is usually not successful. It was successful in one personal case, prepared with sulfaguanidine, soon after that drug became available. The sinus tract was followed down among loops of small bowel to its connection to the colon and there a closure was possible because the inflammatory reaction of the surrounding colon wall had largely subsided. In addition to the closure by a simple Lembert sutures, re-enforcement of this closure by overlapping two adjacent appendices epiploicae was done. Six years have now elapsed without any evidence of recurrence. As a rule, however, this procedure does not hold great promise.

It is often necessary to divert the fecal stream by proximal colostomy in order to permit the fistula to close. Even this is not always successful because a fecalith lying somewhere along the fistulus tract may act as a foreign body. Another cause for failure of spontaneous closure after colostomy is the amount of scar tissue surrounding the fistulus tract or its connection with the colon. The scar tissue may form a barrier to blood supply adequate to support a healing process which would obliterate the fistula.

A temporary colostomy is of great aid in relieving obstruction which may be transitory (on an inflammatory basis), or in limiting the con-

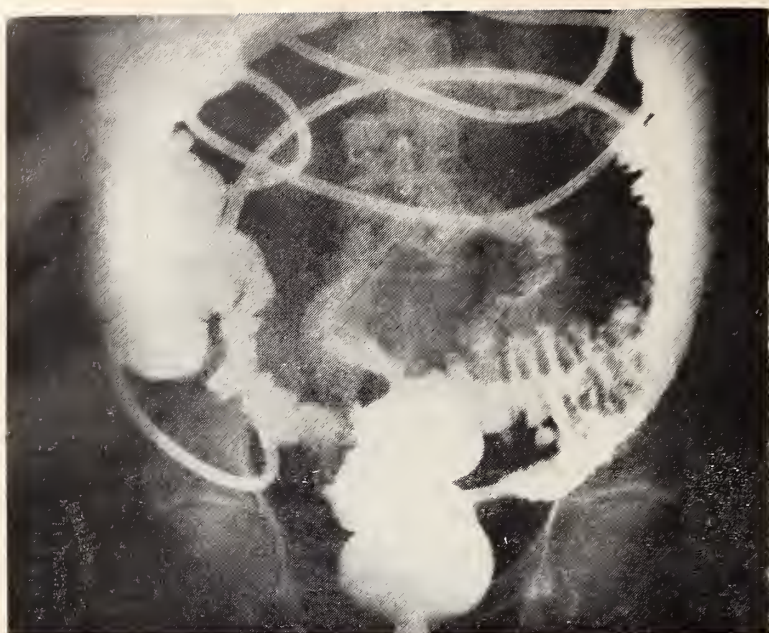


Figure 3b.—Barium enema shows the narrow portion of the sigmoid, the site of the diverticulitis.

tamination caused by a perforation of a diverticulum in a portion of the bowel not easily exteriorized.

Many times a colostomy is made in the hope that diverting the fecal stream may permit sufficient healing in the involved portion of bowel to warrant subsequent closure with re-establishment of the fecal current thus avoiding resection. If the colostomy is closed sooner than six months to a year, this method offers very little hope of being successful. Furthermore, this closure should be preceded by every type of examination possible to demonstrate that the inflammatory process in the colon has subsided. This includes the estimation of the temperature, the white blood count, the examination by barium enema, and a sigmoidoscopic examination both from below and through the colonic stoma. If no evidence of disease is found after 6 to 12 months of colostomy drainage, closure of the colostomy may be done. This was followed by success in approximately one third of the cases reported by Pemberton⁹.

In a small number of cases recurrent perforation or abscess formation involving one portion of the bowel, particularly the sigmoid, or the presence of sufficient obstruction, may indicate the resection of the involved portion of bowel. This procedure is becoming less hazardous due to the employment of preoperative and postoperative measures now available such as intestinal decompression, chemotherapy, the use of antibiotics coupled with more skillful anesthesia

and free use of such supportive measures as transfusions and other intravenous fluids. The decision to do a resection with a primary anastomosis or to do a two stage procedure must be based on the merits of the individual case. Generally speaking, the risk is less in the exteriorization with secondary closure of the colostomy, but it must be remembered that this plan entails two periods of anesthesia and possible postoperative complications each of which contributes a definite hazard. On the other hand, if the operation is undertaken in younger individuals who are better risks, with proper preparation a low mortality may be obtained. The decision to use a colostomy with the primary resection and anastomosis is based on the presence or absence of obstruction and distention. It is generally conceded that the use of chemotherapy and antibiotics has been the major factor in the decrease in mortality of resection of the colon whether it is due to carcinoma or the inflammatory diseases.

SOLITARY DIVERTICULITIS OF THE CECUM

Solitary diverticulitis of the cecum is a rare condition. Ninety-nine cases have been reported at the present time¹². Other than the age group it involves, it is indistinguishable from appendicitis. To make the situation more confusing, many of the recent reports show that it occurs in a younger age group than diverticulitis of the other side of the colon so that even the difference in age is not a helpful distinction in many of the cases. Solitary diverticulitis of the cecum

must be considered in patients with signs and symptoms of appendicitis and who have had, according to the history, a previous appendectomy. It must also be considered in those patients who have been operated upon with a diagnosis of acute appendicitis and a normal appendix is disclosed. In addition to a search for Meckel's diverticulum which is often undertaken under these circumstances, inspection and palpation of the cecum and ascending colon should be done to rule out the presence of an inflamed diverticula in these parts of the large bowel.

The treatment of solitary diverticulitis of the cecum is not standardized. It must be determined upon the findings in each instance. Occasionally, resection and closure of the inflamed diverticulum may be done, but this is usually difficult because of the thickening and friability of the adjacent bowel wall. Establishment of a cecostomy seems to be the procedure most often employed and can be done by sewing a catheter into the opening made by resecting the inflamed diverticulum. The cecostomy, of course, would be expected to close spontaneously upon withdrawal of the tube. Resection of the colon may be necessary in those instances where a long continued inflammatory process in a solitary diverticulum has led to the formation of a granulomatous mass. Many times this seeming radical procedure is justified because it is impossible to distinguish between an inflammatory process and a large inflamed, infected or ulcerated carcinoma of the colon. Even if the suspected benign nature of the lesion were proven by frozen section at operation, resection of such a mass would still be in order as it constitutes a mechanical disturbance in the motility of this

portion of the gastrointestinal tract and with subsequent contraction it may also lead to obstruction.

SUMMARY AND CONCLUSION

It is recommended that one should think of diverticulitis in all abdominal complaints after age forty. It is well to remember that the indications for emergency surgery are rare and conservative management is almost always indicated. Surgical intervention is reserved for complications. Surgery should be undertaken only after careful study of the patient and his problems, a satisfactory period of observation, and an accurate evaluation of the lesion.

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Treatment of Infantile Hernia by Ligation

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Today, as from the days of Celsus, infantile hernia is treated with taping or strapping. Yet the method is not completely satisfactory, for it frequently fails, is long drawn out in time, is difficult to maintain and is often associated with skin reactions. Both the disease and its treatment are of concern to the mother.

A simple and very effective remedy is suggested. This form of treatment has been used for the past one year on 14 cases with excellent results in every case. The infant may be operated any time after the cord is healed and the presence of the hernia is established. The area about the umbilicus is infiltrated with local anesthetic (1% Novacaine) and an elliptical incision along the lines of cleavage of the skin is made below the umbilicus. The incision is carried through the skin to the subcutaneous tissue. The neck of the sac is exposed to its base with blunt dissection (opening and closing and gently advancing a blunt curved forceps). The forceps then is caused to encircle the hernial sac at its base, being brought out again through the wound to grasp and pull through a No. 1 chromic catgut strand. This is used as a ligature about the hernial base. None of the contents of the sac or the epidermis, of course, are to be included. This is assured by ligating it against a blunt instrument which holds the rupture reduced as the ligature is drawn taut. A skin suture may be used or not, as the wound edges tend to fall together.

On the cases so treated the following interesting facts have been noted:

1. The neck of the sac is very tough and almost impossible to puncture with the blunt instrument used, due to the reflection of the rectus sheath upon it.

2. The procedure is not upsetting to the child. Very little change in eating or sleeping habits occurs. Sedation is not necessary. The baby is handled entirely as an outpatient.

3. It is not necessary to open the peritoneal sac as cyst formation does not occur.

4. Non absorbable ligatures are not necessary, as chromic catgut holds long enough for permanent sealing. Occasionally, in using silk a sinus develops. Removal of the ligature, and this is easy in the office, is followed by prompt healing and without recurrence of the hernia.

5. It is not necessary to ligate the absolute base of the hernia if the ligature is sufficiently low to include the rectus sheath reflection.

The following precautions should be taken:

1. Care should be exercised not to include sac contents or skin in the ligature. The sac could be opened after placing the ligature, if in doubt, but this is rarely necessary.

2. Absolute asepsis should be used. The procedure should not be attempted in the office although it is simple and takes but a few minutes.

3. Hemostasis must be assured at the finish. Infants cannot afford to lose much blood.

SUMMARY AND CONCLUSIONS

1. Infantile hernia can be simply, safely, quickly and permanently cured by ligation.

2. A technique of so doing with precautions and results is described.

CASE REPORTS



Malignant Melanoma Virtually Limited To Serous Surfaces

**John F. Barnes, M.D. and
Lester S. King, M.D.
Chicago**

Malignant melanoma is a relatively infrequent tumor, Friedman and Lederer¹ reporting 5 in 3,332 autopsies or a frequency of 0.13%. One-third of all malignant melanomas occur in the choroid of the eye² but more commonly the tumor has its origin in the skin or mucous membranes. Among the less infrequent sites are meninges, ovary, epididymis, and gall-bladder. The older literature divided malignant melanoma into melano-fibrosarcoma, melano-epithelioma, melano-sarcoma, melano-endothelioma and perithelioma. The recent literature prefers the term malignant melanoma to include all of the other groupings. The most widely accepted work on pathogenesis is that of Masson^{3,4} who demonstrated that nevus and malignant melanoma cells are derived from cells of the

peripheral nervous system, especially the tactile-corpuseles of Merkel-Ranvier and the corpuseles of Meisner. This theory has received the support of Laidlaw⁵ and Ewing⁶.

Willis⁷ in his text on the Spread of Tumors states that melanotic tumors yield metastases with prolific impartiality in almost all tissues. Ocular melanomas frequently metastasize heavily to the liver^{1, 8}. Malignant melanoma arising in skin or mucous membrane may give widespread metastases in kidneys, adrenals, prostate, bladder, uterus, brain, and meninges^{9, 10}. Bone is only rarely involved¹¹.

Unusual metastases of malignant melanoma are reported infrequently in the literature. Gerwood⁸ reports a case of generalized melanomatosis arising from a pigmented nevus of the left arm. In addition to metastases to the organs, both pleurae were extensively involved.

From the Pathology Laboratory of the Illinois Masonic Hospital, Chicago, Illinois.



Figure 1. Loop of small intestines, showing tumor nodules studding the mesentery.



Figure 2. Recto-vesical pouch, with marked accumulation of tumor nodules on the peritoneal serosa.

Way and Light¹² report a case of generalized melanosis, with widespread involvement, the primary site being the skin of the back. At autopsy the skin was covered with hundreds of tumor nodules. Nodules also were found beneath the nails of the fingers and toes, in the vagina and labia. In addition, the surface of omentum was affected, as well as the serosa of intestines, the uterus, pericardium, and pleura of the left lung. Organ metastases included both lungs, both kidneys, both suprarenals, mucosa of the appendix and large bowel. The second case reported by Friedman and Lederer¹ in addition to generalized metastasis showed bilateral involvement of the pleura.

Involvement of the serous surfaces in generalized melanomatosis is apparently a rather infrequent occurrence in comparison with organ metastases. The case herein reported is particularly unusual in that the tumor was limited almost exclusively to the serous surfaces.

CASE HISTORY

C. A., a white man, aged 72 was admitted to this hospital April 21, 1947. Three weeks prior to admission, when at work as a checker in a department store, he had a sudden knife-like pain in the left chest, left hypochondrium and epigastrium. In the subsequent three weeks he had been at home under a physician's care, unable to eat solid foods because of nausea and vomiting. He had alternating constipation and diarrhea, with loss of 15 pounds of weight.

On admission, the essential physical findings showed an emaciated male patient with many flat naevi scattered over the abdomen. There was a crusting of the right ala nasae with slight deformity anteriorly. Decreased breath sounds and flatness were found over the base of the left lung. The abdomen was distended. No palpable masses were noted, but there was tenderness in the left hypochondrium. There was a right indirect inguinal hernia. The right leg and foot was cyanotic up to the lower

one-third of the thigh. X-ray examination on April 21 showed a moderate amount of fluid in the left chest. On April 26, repeat x-ray after thoracocentesis with removal of 1100 cc. of fluid showed no fluid, but atelectasis and an area of fibrosis suggestive of an old pulmonary infarct. Pathological examination of the pleural fluid showed malignant cells, the origin of which could not be determined. X-ray following barium enema revealed some type of low grade obstruction in the sigmoid colon with moderate fecal stasis in the entire colon to the point of narrowing. The RBC was 4,650,000, the WBC was 23,500, sedimentation rate 6 mm. He had relief from chest pain following the thoracocentesis. Abdominal distension was relieved. However, the right leg continued to be cyanotic and it was packed in ice. Before a line of demarcation was established in the thigh, the patient became progressively weaker and on April 29th, 8 days after admission, he expired.

An autopsy was performed 14 hours after death. Only the essential findings relative to the tumor are included in the briefed protocol.

On the skin there were several small pigmented spots 1 - 3 mm. across scattered over the abdomen, all of which appeared grossly benign. In the abdomen the mesentery presented a most remarkable appearance. It was thickened to a depth of 8 - 11 mm. and was composed of a myriad of closely packed nodules 1 - 2 mm. across, of a reddish-brown color, intermingled with a few yellowish tabs. These closely packed nodules resembled the "pile" of a rug. In some portions this tissue was matted together to form confluent masses. The serosal surfaces of the intestines, together with the surfaces of the mesentery, were studded with innumerable small, relatively discrete nodules, of reddish-brown color, 3 - 5 mm. across (Figure 1) with innumerable minute vesicle-like lesions $\frac{1}{2}$ - 1 mm. across of pale, translucent, grayish-white appearance. The parietal peritoneum showed numbers of similar masses, especially in the recto-vesical pouch.

Examination of the thorax showed each pleural cavity to contain about 500 cc. of a bloody fluid. The parietal and visceral pleurae were heavily studded with small, reddish-brown nodules. Overlying the 3-4-5-6th ribs near the costo-vertebral angle of the left thorax, was a large mass 10 x 8

x 2 cm. of a dark reddish-brown color, composed of confluent tumor masses, situated within the pleura but not invading bone. They were also scattered over the external surface of the pericardial sac, but none on the inner surface. There were no tumor nodules in or on the heart.

The spleen showed a few scattered dark brown nodules, $\frac{1}{2}$ - 1 mm. across, over the capsule, similar to those on the pleura. No tumor could be seen in the splenic substance. No tumor was found on the capsular surface of the liver. None was seen in the pancreas. There were numerous small, flat, brown tumor nodules scattered over the anterior surface of the stomach, but none in the wall or on the mucosal surface. The duodenum appeared normal. The serosa of the small intestines revealed innumerable tumor masses, 1 - 3 mm. across, at the mesenteric border, and extending with diminishing frequency toward the antimesenteric border. The mesentery was studded with small nodules. The intestinal mucosa appeared everywhere intact, with no evidence of tumor. The metastases were less numerous on the serosa of the large intestine, and much less numerous in its mesentery. The constriction in the sigmoid was caused by a fibrous band passing from the mesentery to the lateral abdominal wall. The adrenals appeared grossly free of tumor, and no trace of tumor could be found in the kidneys. The peritoneum of the recto-vesical pouch was very heavily studded with tumor nodules, which were more or less continuous with a massive tumor infiltration in the region of the right inguinal ring. (Figure 2). The parietal tunic of the testes was relatively thin, but its inner surface was covered with a layer of dark brown chocolate-like material that was faintly nodular and slightly friable, and had some extension along the attachment of visceral and parietal layers. This dark brown material extended upward into the spermatic cord, infiltrating the substance. The testicular substance showed no trace of neoplasm. The epididymis showed on section, dark brown, granular material, occupying most of the bulk, especially at the head. The left testicle was clear, the left epididymis showed a few zones of faintly granular and grayish-brown color, situated in the head.

Microscopic examination of the tumor showed essential uniformity of all of the widespread metastases. The tumor cells were present in

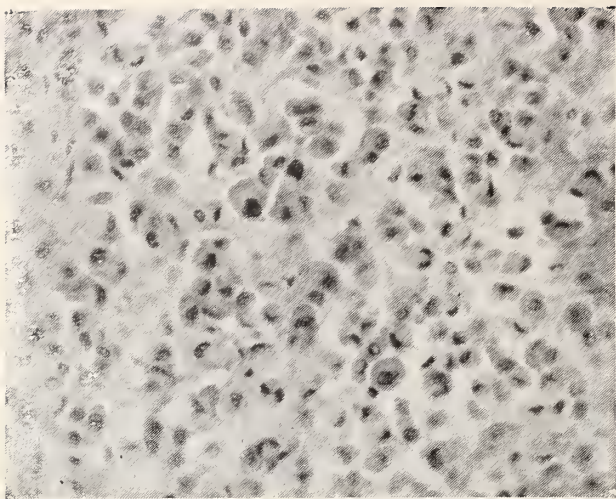


Figure 3. Photomicrograph of characteristic microscopic field. The tumor cells are moderately large and relatively discrete. They tend to show a clustering and pseudo-alveolar grouping. With the filters used, the pigment granules do not stand out, but have been vividly demonstrated with ammoniacal silver impregnation.

small clusters and groups, somewhat separated by delicate circumscribing bands of connective tissue. Individual tumor cells, within these clusters, revealed irregular but pale-staining nuclei, with abundant cytoplasm. Mitotic figures were numerous, and occasional giant nuclei were seen. The cytoplasm, generally compact and clearly defined, was occasionally vacuolated. Very many of the cells contained large amounts of granules, which were poorly refractile, and which gave a negative stain for iron by the Prussian blue reaction but impregnated darkly with ammoniacal silver solution. Some of the tumor nests presented a pseudo-alveolar appearance, but most were solid and compact. (Figure 3)

In addition to the very widespread serosal metastases, a few nodules of tumor tissue were found within parenchymatous organs. In the lung, where the pleural surface was very heavily studded, tumor nests were found a short distance within the underlying lung parenchyma. In addition, further removed from the pleura, some small tumor nests were indentified in peri-bronchial connective tissue, apparently by lymphatic spread from the pleura. In the epididymis, tumor nests were also found within the parenchyma, although with less intensity than on the serosal surface. The only other parenchymatous metastases were noted in the liver, where occasional small microscopic foci were visible on careful examination. None of

these foci was more than one-half of a high-power microscopic field in diameter. The remaining parenchymatous organs were entirely free of tumor invasion.

No permission was obtained for examination of the head. At the time of autopsy no primary origin for the tumor was discovered. In subsequent study of the case history, it was learned that the patient had had an operation on his nose for removal of a tumor, at another Chicago hospital. Investigation of this lead revealed that there had been two separate operations, one of which had escaped the patient's recollection. The tumor on the nose was a basal cell carcinoma. A small skin tumor had been removed from the submaxillary region on May 23, 1946. The pathologic report on this specimen was malignant melanoma of the skin. Through the courtesy of Dr. M. C. Wheelock this slide was examined. The pathology was identical to the metastatic lesions observed at autopsy.

COMMENT

This case presents a number of unusual features. Clinically, there were no findings indicative of so heavy involvement of the serous surfaces. It is of further interest to note that in spite of the heavy metastases found at autopsy the correct diagnosis was not suspected clinically. At autopsy the primary site was not known. It is not unusual for the primary site to be overlooked or never found in spite of widespread metastases. In this report, the primary tumor had been removed 11 months previously. The patient had forgotten about it and made no mention when the history was obtained, and it was only following the autopsy in searching for the primary, that its existence was discovered.

It is further noted that no case presented in the literature describes such extensive involvement of serous membranes with so negligible involvement of parenchymatous organs. The mode of dissemination is uncertain. Willis⁷ states that melanotic growths, whether cutaneous or ocular in origin, yield lymphatic metastases in a considerable proportion of cases, but blood dissemination often co-exists and is usually the predominant mode of extension. It is suggested that in this case the lymphatics were the primary route of spread into the thorax and then to the peritoneum, by further lymphatic extension. Drop metastases with implantation on serosal surfaces probably accounted for the

pathological picture, and haemic spread was late and of no significance.

SUMMARY

A 72 year old white man with a history of chest pain for about 3 weeks, died 8 days after admission. The autopsy showed enormously extensive metastases of malignant melanoma, essentially limited to the serous surfaces of the body. The metastases within the parenchymatous organs were minimal and insignificant in amount. The primary lesion was a skin tumor removed 11 months previously, which had escaped the patient's recollection.

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TREATMENT NOW AVAILABLE AIDS MANY ARTHRITIS VICTIMS

Sufferers from arthritis who will have to forego treatment by the recently announced drugs, Compound E and ACTH, until these products are obtainable in larger quantities and at lower prices still have available to them other effective means of therapy.

"There can be no doubt that remedies have been evolved through years of patient clinical observation which suffice for many cases," Dr. Edward F. Rosenberg of Chicago writes in the July 2 issue of *The Journal of the American Medical Association*.

"The best end results obtained are not from the application of any single measure, but from continuing intelligent application of a program of measures directed against the many abnormalities produced by rheumatoid arthritis.

"The outlook is not dark for every person with rheumatoid arthritis. In fact, the outcome is satisfactory in a majority of cases. A physician who undertakes the treatment of patients with rheumatoid arthritis should approach this problem with a spirit of encour-

agement and with a reasonable degree of optimism."

He points out that in addition to "common sense" measures, certain additional forms of therapy for rheumatoid arthritis require consideration. Among these, gold therapy is perhaps the most important at the moment, he says.

"Pain and stiffness resulting from osteoarthritis have been observed to disappear during jaundice, and it is therefore to be hoped that progress in the application of the jaundice phenomenon to arthritis may bring relief also to sufferers from osteoarthritis," Dr. Rosenberg also says.

Dr. Rosenberg's article was prepared before the recent announcement of Compound E and ACTH and does not mention these two products. In his review of other forms of treatment he stresses the importance of the family physician.

Dr. Philip S. Hench and associates of the Mayo Clinic, Rochester, Minn., in a preliminary report recently said that certain clinical and biochemical features of rheumatoid arthritis have been markedly improved by the daily intramuscular injection of the hormones, Compound E or ACTH. So far, both products are obtainable only in small quantities.

HOUSE OF DELEGATES



SECOND SESSION, MAY 18, 1949

The second session of the House of Delegates was called to order by the President, Dr. Percy E. Hopkins, on Wednesday, May 18, 1949 at 9:21 A.M.

THE PRESIDENT: I declare the second meeting of the House of Delegates of Illinois State Medical Society in session. The Committee on Attendance please come forward and pass out attendance slips. The men who were seated as delegates will register; those not seated will not register. Only certified delegates, Councilors and Officers must sign the attendance slips. While the slips are being passed we will have the roll call by the Secretary. (Secretary calls the roll.) Gentlemen, with your indulgence I should like to present to you for a few minutes a very good friend of the medical profession. It affords me pleasure at this time to present a man who is carrying our fight to the medical profession and to the lay people throughout the middle west, Mr. Edward F. Stegen.

MR. STEGEN: This is a very pleasant surprise. I thought I could slip into the back of the room and listen. It is also a pleasant surprise to be here because I think this makes my second consecutive year that I had the pleasure of addressing the House of Delegates. I think it will be interesting to know in the last three and a half months with the very fine assistance of the Officers of your association and your Public Relations man, Mr. Leary, and the members of your staff we have been able to make quite a dent in the thinking of the people of Illinois. So far as my very minor part of that situation, I have addressed about seventy-one audiences in the past two and a half months, made a number of radio talks and contacted a number of individuals who may be regarded as leaders in their respective communities. I believe sincerely if every state in the Union assumed the share of responsibility which the Illinois State Medical Society has assumed

that it would not be too long until we allayed this effort on the part of those who want socialized medicine. Unhappily my convictions lead me to believe that other states are not as far advanced and have not taken it as seriously as they should. In some states the planning has not been as good.

As to the future we will have the customary lull in the matter of compulsory medical care during the summer. I think our opponents will try to take advantage of this lull. The bill will not come up at this session and consequently our efforts may lag. I think in December and January we will get back at the propagandists of the opposition. The medical men must be prepared with every device they possess to meet that propaganda drive.

It has been great pleasure to serve you in the state and I hope our happy relationship may continue for a long time in the future.

THE PRESIDENT: Thank you, Mr. Stegen. We will now have the report of the Credentials Committee.

DR. E. S. HAMILTON, Kankakee: Your Credentials Committee has certified 72 Delegates from downstate, 55 from the Chicago Medical Society and 22 Councilors and Officers, a total of 149. I move you that this constitute the voting strength of this House for this meeting. (Motion seconded by Dr. W. O. Thompson, Chicago and carried).

THE PRESIDENT: I wish to introduce the President of the Medical Society of a neighboring state whom it will be my pleasure to introduce this afternoon as a guest orator in surgery, Dr. Nathaniel Alcock, Iowa City.

What is your pleasure regarding the Minutes of the previous session?

DR. HAMILTON: I move that the reading of the Minutes be dispensed with. (Motion seconded by Dr. C. Paul White, Kewanee, and carried).

THE PRESIDENT: We now come to the election of Officers. Gentlemen, the first officer whom you are to select is the President-Elect of the Illinois State Medical Society, what is your pleasure?

DR. P. R. BLODGETT, Chicago Heights: The man whom I propose as President Elect of this Society has served us well as Councilor from the third district and this last year as Chairman of the Council. By training, by experience and by determination he will follow in the steps of those who have preceded him in this high office. It is a privilege, a pleasure and a personal honor to present that prince of parliamentarians, that leader of men, Harry Hedge.

THE PRESIDENT: Are there any further nominations?

DR. I. H. NEECE, Decatur: I move that the nominations be closed and the Secretary instructed to cast the affirmative ballot for Dr. Hedge. (Motion seconded by Dr. Robert Hayes, Chicago and carried).

(The ballot was cast and the President declared Dr. Hedge elected).

THE PRESIDENT: Dr. Hedge will you take a bow?

DR. HEDGE: I hope I can live up to what has been said about me.

THE PRESIDENT: Nominations are in order for First Vice-President.

DR. WALTER C. BORNEMEIER, Chicago: I wish to place in nomination Dr. M. M. Hoeltgen of Chicago.

DR. ROBERT HAYES, Chicago: I move that the nominations be closed and the Secretary instructed to cast the affirmative ballot for Dr. Hoeltgen. (Motion seconded by Dr. Wade Harker, Chicago and carried).

(The ballot was cast and the President declared Dr. Hoeltgen elected).

THE PRESIDENT: Nominations are in order for Second Vice-President.

DR. C. O. LANE, West Frankfort: I wish to place in nomination Dr. H. A. Felts of Marion. (Nomination seconded by Dr. W. W. Fullerton, Steeleville).

DR. E. S. HAMILTON: I move the nominations be closed and the Secretary cast the affirmative ballot for Dr. Felts. (Motion seconded by Dr. W. W. Fullerton, Steeleville and carried).

(The ballot was cast and the President declared Dr. Felts elected as Second Vice-President).

THE PRESIDENT: Nominations are in order for Secretary-Treasurer.

DR. W. E. KITTLER, Rochelle: I would like to place in nomination a man who has had some experience as Secretary but not quite as much experience as Treasurer. I understand he begins his 26th year as Secretary. I would like to place in nomination Dr. Harold M. Camp as your candidate for Secretary-Treasurer. (Nomination seconded by Dr. Fred H. Muller, Chicago and carried).

DR. E. E. DAVIS, Avon: I move that the nominations be closed and the President cast the affirmative ballot for Dr. Camp. (Motion seconded by Dr. Bernard Klein, Joliet and carried).

(The ballot was cast and the President declared Dr. Camp elected as Secretary-Treasurer for the ensuing year).

THE PRESIDENT: The next order of business is the election of Councilors from the Third District, the terms of Harry M. Hedge and H. Prather Saunders expiring.

DR. G. HENRY MUNDT, Chicago: To succeed Dr. Hedge I would like to nominate Dr. Walter C. Bornemeier for a three year term.

DR. FRED H. MULLER, Chicago: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. Bornemeier. (Motion seconded by Dr. Robert Hayes, Chicago and carried).

(The ballot was cast and the President declared Dr. Walter C. Bornemeier elected as Councilor of the Third District for a three year term).

DR. H. K. SCATLIFF, Chicago: I would like to place in nomination Dr. H. Prather Saunders to succeed himself for a three year term. (Nomination seconded by Dr. Fred H. Muller).

DR. W. O. THOMPSON, Chicago: I move the nominations be closed and the Secretary cast the affirmative ballot for Dr. Saunders. (Motion seconded by Dr. F. L. Stone, Chicago and carried).

(The ballot was cast and the President declared Dr. H. Prather Saunders elected as Councilor of the Third District for a three year term).

THE PRESIDENT: Nominations are in order for Councilor for the Fourth District, Dr. Charles P. Blair retiring.

DR. C. M. FLEMING, Rushville: I would like to place in nomination Dr. Charles P. Blair to succeed himself.

DR. E. E. DAVIS, Avon: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. Blair. (Motion seconded by Dr. C. M. Fleming, Rushville and carried).

(The ballot was cast and the President declared Dr. Charles P. Blair elected as Councilor of the Fourth District for a three year term).

THE PRESIDENT: Nominations are in order for Councilor of the Fifth District, Dr. Ralph P. Peairs retiring.

DR. FRANK M. HAGANS, Lincoln: I would like to nominate Dr. Ralph P. Peairs to succeed himself.

DR. B. E. MONTGOMERY, Harrisburg: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. Peairs to succeed himself. (Motion seconded by Dr. Bernard Klein, Joliet and carried).

(The ballot was cast and the President declared Dr. Ralph P. Peairs elected as Councilor of the Fifth District for a three year term).

THE PRESIDENT: Nominations are in order for Councilor of the Seventh District, Dr. Charles H. Hulick retiring.

DR. A. R. WHITEFORT, St. Elmo: I wish to nominate Dr. Charles H. Hulick to succeed himself.

DR. ARTHUR F. GOODYEAR, Decatur: I move that the nominations be closed and the Secretary cast

the affirmative ballot for Dr. Hulick to succeed himself. (Motion seconded by Dr. C. Paul White of Kewanee and carried).

(The ballot was cast and the President declared Dr. Charles H. Hulick elected as Councilor of the Seventh District for a three year term).

THE PRESIDENT: Nominations are in order for Councilor of the Eighth District, Dr. Harlan English retiring.

DR. A. E. DALE, Danville: Representing Vermilion County I would like to place in nomination Dr. Harlan English to succeed himself.

DR. W. H. SCHOWENGERDT, Champaign: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. English. (Motion seconded by Dr. A. E. Dale and carried).

(The ballot was cast and the President declared Dr. Harlan English elected as Councilor of the Eighth District for a three year term).

THE PRESIDENT: The next order of business is the election of Delegates to the American Medical Association. These delegates will serve until January 1st, 1952 in accordance with the A. M. A. by-laws. The terms of the following are expiring: Cook County: Robert H. Hayes and Fred H. Muller. Downstate: Mather Pfeifferberger, Edward H. Weld and one delegate to succeed Edwin S. Hamilton to serve until January 1st, 1951.

DR. C. H. PHIFER, Chicago: I would like to nominate Dr. Fred H. Muller to succeed himself. (Nominations seconded by Dr. Oscar Hawkinson, Chicago).

DR. OSCAR HAWKINSON, Chicago: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. Muller. (Motion seconded by Dr. W. O. Thompson, Chicago and carried).

(The ballot was cast and the President declared Dr. Fred H. Muller elected).

DR. OSCAR HAWKINSON, Chicago: I would like to nominate Dr. Robert Hayes to succeed himself.

DR. FRANK P. HAMMOND, Chicago: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. Hayes. (Motion seconded by Dr. Oscar Hawkinson and carried).

(The ballot was cast and the President declared Dr. Hayes elected).

THE PRESIDENT: Nominations are in order for downstate delegates.

DR. A. E. DALE, Danville: I wish to nominate Dr. Mather Pfeifferberger to succeed himself.

DR. L. J. HUGHES, Elgin: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. Pfeifferberger. (Motion seconded by Dr. Bernard Klein, Joliet and carried).

(The ballot was cast and the President declared Dr. Mather Pfeifferberger elected).

DR. W. H. SCHOWENGERDT, Champaign: I would like to place in nomination Dr. Harlan English to succeed Dr. Edward H. Weld.

DR. L. J. HUGHES, Elgin: I move that the nominations be closed and the Secretary cast the affirma-

tive ballot for Dr. English. (Motion seconded by Dr. B. E. Montgomery, Harrisburg and carried).

(The ballot was cast and the Chair declared Dr. Harlan English elected).

THE PRESIDENT: Nominations are in order for one delegate to succeed Dr. E. S. Hamilton.

DR. V. M. SERON, Joliet: I would like to place in nomination Dr. Bernard Klein of Joliet.

DR. B. E. MONTGOMERY, Harrisburg: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. Klein. (Motion seconded by Dr. V. M. Seron, Joliet, and carried).

(The ballot was cast and the President declared Dr. Bernard Klein elected to succeed E. S. Hamilton to serve until January 1st, 1951).

THE PRESIDENT: The next order of business is the election of alternate delegates to the American Medical Association. All are designated as alternates at large. Cook County: The terms of H. K. Scatliff and Warren W. Furey expiring. One alternate to succeed Frank L. Brown deceased to serve until January 1st, 1951. Downstate: Terms of D. M. Roberts and Walter C. Blaine expiring.

DR. ROBERT HAYES, Chicago: I would like to nominate Dr. H. K. Scatliff to succeed himself as my alternate.

DR. RICHARD GREENING, Chicago: I move that the nominations be closed and the Secretary instructed to cast the affirmative ballot for Dr. Scatliff. (Motion seconded by Dr. W. O. Thompson and carried).

(The ballot was cast and the President declared Dr. H. K. Scatliff elected).

DR. J. J. MOORE, Chicago: I wish to nominate Dr. Warren W. Furey to succeed himself as alternate for Dr. Rollo K. Packard.

DR. RICHARD GREENING, Chicago: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. Furey. (Motion seconded by Dr. Robert Hayes, Chicago, and carried).

(The ballot was cast and the President declared Dr. Warren W. Furey elected).

DR. ROBERT N. HEDGES, Chicago: I would like to place in nomination Dr. E. T. McEnery to succeed Frank L. Brown, deceased.

DR. ROBERT HAYES, Chicago: I move the nominations be closed and the Secretary cast the affirmative ballot for Dr. McEnery. (Motion seconded by Dr. W. O. Thompson, Chicago, and carried).

(The ballot was cast and the President declared Dr. E. T. McEnery elected to serve until January 1st, 1951).

THE PRESIDENT: I shall now entertain nominations for alternate delegates from downstate.

DR. W. E. KITTLER, Rochelle: I would like to place in nomination Dr. L. S. Reavley, Sterling, as alternate to Dr. Harlan English.

DR. I. H. NEECE, Decatur: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. Reavley's election. (Motion seconded by Dr. L. J. Hughes, Elgin and carried).

(The ballot was cast and the President declared Dr. L. S. Reavley elected).

DR. E. H. WELD, Rockford: I would like to place in nomination Dr. I. H. Neece, Decatur as alternate to Dr. Pfeifferberger.

DR. L. J. HUGHES, Elgin: I move the nominations be closed and the Secretary cast the affirmative ballot for Dr. Neece. (Motion seconded by Dr. Harlan English, Danville, and carried).

(The ballot was cast and the President declared Dr. I. H. Neece elected).

THE PRESIDENT: Nominations are in order for an alternate for Dr. Bernard Klein.

DR. V. M. SERON, Joliet: I would like to place in nomination Dr. J. E. Wheeler, Belleville, as alternate for Dr. Klein.

DR. B. E. MONTGOMERY, Harrisburg: I move the nominations be closed and the ballot cast for Dr. Wheeler as alternate for Dr. Klein. (Motion seconded by Dr. I. H. Neece, Decatur, and carried).

(The ballot was cast and the President declared Dr. J. E. Wheeler elected).

THE PRESIDENT: Before we proceed to the election of the tenth delegate to the American Medical Association to which we are now entitled what is your pleasure?

DR. G. H. MUNDT, Chicago: I move that we go into Executive Session. (Motion seconded by Dr. Richard Greening and carried).

DR. W. E. KITTLER, Rochelle: I would like to make a motion that the presidents and secretaries of the component societies be permitted to remain. Motion seconded by Dr. Robert Hayes, Chicago).

DR. MUNDT: I yield to no man in my admiration of the work done by the county presidents and secretaries, but we must follow the precedent of our parent body, the A. M. A., in this, and that is definitely out in the American Medical Association. My friends are going to tell me that it takes temerity to say this. I say it takes a fool to say what I have said but I think we had better follow the precedent of the A. M. A. and hence I am opposed to the amendment as presented.

DR. KITTLER: That might be all right for the A. M. A., but where would the A. M. A. get off if it were not for the State Society and the County Societies, which form the A. M. A. I still think it is out of order and say it is a slam at our secretaries and presidents. I would still like to see my amendment acted upon.

DR. E. S. HAMILTON, Kankakee: I think Dr. Kittler is in error. The A. M. A. has no desire to interfere in the affairs of the State Society.

DR. WALTER C. BORNEMEIER, Chicago: We know the A. M. A. keeps alternate delegates out of any Executive Session. However, there are a great many of us who are not in favor of what they do when they keep alternate delegates out of the Executive Session. I am in favor of the amendment to permit the presidents and secretaries of the component Societies to remain.

THE PRESIDENT: We shall vote on the amendment that the presidents and secretaries be allowed to remain in the Executive Session. (The amendment is carried).

THE PRESIDENT: We will vote on the original motion as amended to go into Executive Session allowing the presidents and secretaries to remain. The original motion without the amendment would not provide for alternate delegates. The amendment has passed. We are now voting on the original motion as amended. (Motion was carried).

THE PRESIDENT: Will the Committee on Attendance come forward and poll the room. The Chair entertains a motion to provide that alternate delegates who had been seated as delegates will remain and that alternate delegates who have not been seated will not remain.

DR. WALTER C. BORNEMEIER: Is it possible to reconsider the amendment or the motion?

THE PRESIDENT: You will have to reconsider the motion as amended.

DR. G. H. MUNDT, Chicago: I move that we reconsider the motion as amended. (Motion seconded by Dr. Walter C. Bornemeier).

THE PRESIDENT: It is moved and seconded that the House reconsider its action on the motion as amended that was recently passed.

DR. WADE HARKER, Chicago: We do not need to reconsider.

THE PRESIDENT: A motion to reconsider takes precedence.

DR. HARKER: I move that we withdraw reconsideration and that we permit alternate delegates to remain. (Motion seconded by Dr. Walter C. Bornemeier and carried).

THE PRESIDENT: The alternate delegates will remain.

(NOTE: In this executive session, there was discussion on the procedure to be followed relative to the selection of the additional delegate and when a definite plan was approved, the following procedure followed.)

THE PRESIDENT: Nominations are in order for election of the tenth delegate from the Illinois State Medical Society to the House of Delegates of the American Medical Association.

DR. BERNARD KLEIN, Joliet: I wish to place in Nomination the name of Dr. E. P. Coleman of Canton as the tenth delegate.

DR. HAROLD SWANBERG, Quincy: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. Coleman. (Motion seconded by Dr. B. E. Montgomery, Harrisburg and carried).

(The ballot was cast and the President declared Dr. E. P. Coleman elected as the tenth delegate to the A. M. A.).

THE PRESIDENT: Nominations are in order for an alternate delegate for Dr. Coleman.

DR. HAROLD SWANBERG, Quincy: I would like to name Dr. E. H. Weld of Rockford as the alternate delegate.

Dr. C. PAUL WHITE, Kewanee: I move that the nominations be closed and that the Secretary cast the affirmative ballot for Dr. Weld as alternate for Dr. E. P. Coleman. (Motion seconded by Dr. W. E. Kittler of Rochelle, and carried).

(The ballot was cast and the President declared Dr. E. H. Weld elected as alternate delegate to Dr. Coleman).

DR. G. H. MUNDT: I move that we arise from Executive Session. (Motion seconded by Dr. W. O. Thompson and carried).

THE PRESIDENT: May we digress in order to call to your attention that many county societies and branch societies throughout the state have already passed definite resolutions in regard to the questions of the Society pertaining to socialized medicine. We have here resolution which was adopted by the Illinois State Dental Society at Peoria on May 11 which was sent to us by special delivery. We have been remiss in failing to have a resolution introduced on Monday that could be acted upon. The Chair feels, with your permission, that it might be possible to authorize the presentation of such resolution.

DR. G. H. MUNDT, Chicago: I move unanimous consent to adopt such resolution as it is presented this morning. (Motion seconded by Dr. Oscar Hawkinson and carried).

THE PRESIDENT: I will ask Dr. Mundt to present this resolution.

Whereas, The Congress of the United States has now before it for consideration a bill known as S. 1679 or H. R. 4612 or H. R. 4613, which would establish a so-called national health program including a compulsory payroll tax scheme of sickness insurance, and

Whereas, this program embodies the distorted interpretations of the national health problem outlined in the Ewing Report and has the support of the present administration, certain small medical splinter groups and the leftwing elements in our population, and

Whereas, such a program would establish political control of medicine and place the politician in a position of dictator between the doctor and his patient and give him regulatory and financial power over the practice of medicine, and

Whereas, such a program would double or triple the present cost of medical care to our nation, result in confiscation of hospitals, impressment into government service of physicians, dentists, nurses and other professions involved in health care, despite present denials of such intent, and

Whereas, such a program would double or triple the quantity of medical care furnished to the American public (now and for many years the finest in the world, and constantly being improved) and it would drive out of the practice of medicine many experienced physicians and it would discourage the finest of our young men and women from entering into such

practice and it would make it impossible to give the careful personal attention necessary to good medicine, and

Whereas, similar programs instituted in various foreign countries have resulted in many cases in deterioration of medical care, and have brought the nations to national bankruptcy, and have contributed to the growth of State Socialism in such countries;

Now therefore be it resolved,

1. That the House of Delegates of the Illinois State Medical Society, representing 10,000 practicing physicians of Illinois, does express its abhorrence and utter condemnation of the proposal to establish national compulsory sickness insurance and

2. That this House of Delegates does hereby request of the Congress of the United States that the Congress reject and vote down S. 1679, H. R. 4612 and H. R. 4613 and any other bill making similar proposals for compulsory sickness insurance, and

3. That copies of this resolution, properly attested by the officers of the Illinois State Medical Society, be forwarded to the President of the United States, to the Vice-President of the United States as President of the Senate, to the Speaker of the House of Representatives and to the Senators and Representatives from Illinois now sitting in the Congress.

The next order of business is the election of standing Committees. The first is the Medico-Legal Committee, two to be elected for a term of three years, Pliny R. Blodgett, Chicago Heights and F. E. Bihss, East St. Louis retiring.

(The following members were nominated, the ballot was cast and the President declared them elected: F. E. Bihss, East St. Louis, P. R. Blodgett, Chicago Heights).

THE PRESIDENT: The Committee on Medical Education and Hospitals, one to be elected for a three year term, Dr. H. O. Munson, Rushville retiring.

DR. C. M. FLEMING, Rushville: I would like to place in nomination Dr. Harlan English of Danville.

DR. E. E. DAVIS, Avon: I move that the nominations be closed and the Secretary cast the affirmative ballot for Dr. English as a member of the Committee on Medical Education and Hospitals. (Motion seconded by Dr. C. M. Fleming and carried).

(The ballot was cast and the President declared Dr. Harlan English elected as a member of the Committee on Medical Education and Hospitals for a three year term).

THE PRESIDENT: The Committee on Medical Benevolence, one member to be elected for a three year term, Dr. Harold M. Camp, Monmouth retiring.

DR. P. R. BLODGETT, Chicago Heights: I nominate Dr. Camp to succeed himself.

DR. WALTER LAWRENCE, Berwyn: I move that the nominations be closed and the President cast the affirmative ballot for the election of Dr. Camp. (Motion seconded by Dr. E. S. Hamilton, Kankakee and carried).

(The ballot was cast and the President declared Dr. Harold Camp elected a member of the Committee on Medical Benevolence for a three year term).

THE PRESIDENT: Nominations are in order for the Committee on Medical Testimony, two to be elected for a term of four years, Harry A. Oberhelman, Chicago, and Edward H. Weld, Rockford, retiring.

DR. H. J. DOOLEY, Oak Park: I nominate Dr. Harry Oberhelman to succeed himself. (Seconded by Dr. A. M. Vaughn, Chicago).

DR. E. S. HAMILTON, Kankakee: I nominate Dr. E. H. Weld to succeed himself.

DR. A. M. VAUGHN, Chicago: I move the nominations be closed and the Secretary cast the affirmative ballot for Drs. Oberhelman and Weld. (Motion seconded by and carried).

(The ballot was cast and the President declared Drs. Oberhelman and Weld elected as members on the Committee of Medical Testimony for a term of four years.

THE PRESIDENT: The next order of business is announcing of awards to scientific exhibits. We should be very grateful to Drs. M. M. Hoeltgen and Leo J. Sweeney for the smooth manner in which things ran last night once they were started. We attempted to streamline the dinner so you people would not get tired. We decided at the last moment that Dr. Coye C. Mason, Chairman and Director of the Scientific Exhibits and his Committee were entitled to some public recognition as were the men who provided the exhibits at their own expense, so for that reason we went back and had that report given last night. The list of the awards will be incorporated in the printed proceedings.

Educational Value

Gold Medal: Frederick H. Falls, Charlotte S. Holt, University of Illinois College of Medicine and the State Department of Public Health. "Forceps"

Silver Medal: David V. Omens, Harold D. Omens Rush Medical College, Division of the Univ. of Ill. "The Dermatological Album"

Bronze Medal: Wayne B. Slaughter, Wisconsin Gen. Hospital, Madison; Stritch School of Medicine of Loyola University; Loyola University School of Dentistry. "Rehabilitation Program for the Hare Lip and Cleft Palate Children."

Bronze Medal: Samuel J. Zakon, Northwestern University Medical School. "The Physician's Creed—Religio Medici".

Bronze Medal: Illinois Society of Pathologists. Illinois Society of Pathologists. "Fresh Tissue Exhibit"

Original Work

Gold Medal: Oscar Sugar, Department of Neurology and Neurosurgery, University of Ill., College of Medicine. "Cerebral Angiography"

Silver Medal: Carroll L. Birch, Louis R. Limarzi, Dept. of Medicine, University of Illinois, College of Medicine "Bone Marrow"

Bronze Medal: D. E. Clark, R. H. Moe, E. E. Adams, Department of Surgery, The University of Chicago. "Radioactive Iodine—Its Use in Diagnosis and Therapy"

Bronze Medal: Wendell G. Scott, Sherwood Moore, Department of Radiology, Washington University School of Medicine, St. Louis, Missouri. "The Use of the Rapidograph in Angiography and Aortography as an Aid in the Diagnosis of Congenital Heart Disease".

Bronze Medal: Benjamin, M. Gasul, Egbert H. Fell, Hans Popper, Maurice Lev, William Mavrelis, James A. Campbell, Carl B. Davis, Jr., Raul Casus, and Hans Hartenstein. Hektoen Institute and University of Ill., College of Medicine. "Congenital Heart in Clinical Medicine"

THE PRESIDENT: The next order of business is the fixing of per capita assessment for 1950 dues. We are spending a lot of money and we have to continue to spend a lot of money. This \$25 that you have paid as a special assessment goes directly to the A. M. A. for use entirely in their educational program. Neither the State nor the county or branch societies get anything from that. You must bear those facts in mind. What is your pleasure regarding the per capita assessment?

DR. W. E. KITTLER, Rochelle: What is the recommendation of the Council? I would like to hear it.

DR. H. M. HEDGE, Chicago: This has not been taken up in the Council so there is no recommendation from the Council as regards the dues.

DR. HAROLD SWANBERG, Quincy: I move that since we need more money that we make the dues \$20 a year, including the \$5 assessment for the Benevolence Fund. (Motion seconded by Dr. Oscar Hawkinson, Chicago).

DR. KITTLER: It is all right for some of these fellows who are specialists but we have trouble in the rural communities to get funds and it makes it very hard. We have 20 or 25 men in our County Society. Some of those fellows will drop out if you continue to raise the dues. Raising the dues may be all right for some of the men who are specialists but you take the men downstate that are near retirement age and they don't want to pay it. A lot of these county societies have only 20 to 25 men and we are going to lose some of those. I think the dues are high enough. As far as I'm concerned I'm willing to pay but if you raise the dues some of the men will drop out. I would like to make an amendment that the dues remain as they are. (Seconded by Dr. Robert Hayes, Chicago).

THE PRESIDENT: I rule that such an amendment is out of order.

DR. E. S. HAMILTON, Kankakee: Having been Chairman of the Finance Committee since Dr. Nagel's death and a member of the Committee before that, I would like to say that during the past fifteen years that I have been on that Committee we have amassed a very nice surplus. The last year we have had to go into the surplus. I do not know how many of your men know how much money your Society spends. I hope occasionally you read over the financial statement. The payments in our Society fund have increased every year for the last few years. I personally have always been in favor of keeping down the expenses but there are times when we have to spend

money and we are in that time. You know the chiropractors and the osteopaths pay more than we do. I do not think there is any way we can run this Society in the next few years without plenty of money. I do not like to see the dues raised but we have either to raise the dues or drop some of our work. I am certainly in favor of raising the dues for about the first time in my life. I hope you will see fit to do it. I hope you will go back to your districts and talk to your people in those districts and explain to them the reason. If the Councilors will do that and if the delegates will do that I do not think we will lose very many members. I advise you to give this your very earnest consideration. We will try to keep within our budget. We are going to do our share in Illinois to win the fight.

DR. KITTLER: What is the surplus? I think the members should know.

DR. HAMILTON: It is in the Handbook in the Secretary's report; it is around \$115,000. It is in government bonds. We have not lost any money on our investments in the last fifteen years. Have you any idea what it costs for our publicity department and the public relations? We are spending a lot of money and we are going to have to spend more and more this year. I am perfectly willing to spend the whole surplus if necessary. We must win this fight and money is what it will take to win it.

THE PRESIDENT: Thank you Dr. Hamilton.

DR. WALTER C. BORNEMEIER: I am in favor of raising more money. If the dues are raised and a number of people need to drop out it would be well to look into the matter. The first of the year we pay \$25 for the A.M.A. assessment. Let us have \$25 for Illinois. Those men who can not pay will not be dropped.

DR. L. J. HUGHES, ELGIN: We are not so poor in this state that we can not pay \$20.

DR. J. ROSCOE MILLER, CHICAGO: When we think of the states like California, Wisconsin and Michigan that are paying much more than we are paying, it seems that we can slightly raise our dues. I would like to see this voted this morning to raise the dues to at least \$20. There was never a time when we needed money as we need it now. If we do not spend it now there will be a time when it will be too late.

THE PRESIDENT: Are you ready for the question? Dr. Kittler's motion was ruled out of order.

DR. KITTLER: I withdraw my motion.

(The motion was voted on and carried to raise the dues to \$20.).

THE PRESIDENT: The next order of business is the selection of a meeting place for the 1950 annual meeting. Has the Secretary any invitations?

THE SECRETARY: We do not have any; however, there have been a good many requests to try to arrange a downstate meeting. We have been trying to find a place where that can be done and it may be best, if the House would like to do as it has done in the last four or five years, to leave it to the judgment of the Council. After a thorough investigation the

Council would be in a far better position to decide on a place of meeting.

DR. ROBERT HAYES, CHICAGO: I move that this be left to the discretion of the Council. (Motion seconded by Dr. W. O. Thompson and carried).

THE PRESIDENT: We now come to the reports of Reference Committees and the action upon same. There is no desire to curb anyone's remarks or discussion in regard to a report but if those speaking to a report will make it as brief as possible we will get through with the reports.

REPORTS OF REFERENCE COMMITTEES

Committee on the Reports of Officers

On Report of the President: This Committee commends in highest terms the very comprehensive report revealing the prodigious amount of work done personally by Dr. Percy E. Hopkins in all departments on the vital problems of today.

Particular recognition is given to the paramount issues of Public Relations, Education and Post Graduate sections.

We highly recommend the suggestion that the Chicago Medical School Graduates be invited to join County Societies. Our opinion is that each Society in the State will give sincere and serious consideration on this action.

(DR. GOODYEAR: I move the adoption of this portion of the report. Motion seconded by Dr. C. Paul White, Kewanee, and carried).

On Report of the President-Elect: The Committee recognizes President-Elect Walter Stevenson has no illusions of the complexity of duties his future office holds. We are in accord that the spade work assigned him by the President, has been done thoroughly and conscientiously.

(DR. GOODYEAR: I move the adoption of this portion of the report. Motion seconded by Dr. Oscar Hawkinson, Chicago, and carried).

On Report of the Secretary-Treasurer: We fully endorse the complete factual report given and particularly commend his explanation of the A.M.A. Special Assessment.

We are in accord that the duties of the Secretary-Treasurer have increased considerably with the Assessment, and that more than ordinary recognition be granted Harold M. Camp at this time.

(DR. GOODYEAR: I move the adoption of this portion of the report. Motion seconded by Dr. Mather Pfeiffenberger, Alton and carried).

Respectfully submitted, Arthur F. Goodyear, Chairman, J. J. Moore, E. E. Davis, Reference Committee on Reports of Officers.

DR. GOODYEAR: I move the adoption of the report as a whole. (Motion seconded by Dr. E. E. Davis, Avon and carried).

Committee on Reports of Councilors

The Chairman's fine report is an interesting record of the many and complex activities of our state society for the past year, of the ever expanding program of work to meet the challenge of our present-day problems

and a real effort to anticipate the new angles of tomorrow. Many activities go unrecorded and, to some degree, unappreciated — but this is only a part of the job of a great state professional society to render the greatest possible degree of service to its members and to society. The chairman, every member of the Council, and those who served on the various state committees are all to be commended for their work in our behalf.

(DR. BLODGETT: I move the adoption of this portion of the report. Motion seconded by Dr. O. W. Rest, Chicago, and carried).

The individual councilors, in their reports record the activities of the Councilors in integrating the work of their Districts into the program of the state society — or necessity this is on a local level. All Councilors have been active and efficient in their work for the common cause. We give to each one of them that time-honored commendation "Well done".

(DR. BLODGETT: I move that this portion of the report be adopted. Motion seconded by Dr. W. O. Thompson, Chicago, and carried).

Respectfully submitted, P. R. Blodgett, Chairman, F. M. Hagans, Robert Mustell, Frank Deneen.

(DR. BLODGETT: I move the adoption of the report as a whole, signed by myself as Chairman, Drs. Hagans, Mustell and Deneen. Motion seconded by Dr. W. O. Thompson and carried).

Committee on Reports of Standing Committees

The Report of *Committee on Medical Service and Public Relation*: Your Reference Committee has carefully read this very extensive, interesting and informative report. It covers many diversified and constructive activities of your society, each implemented with careful thinking and guidance. The report warrants careful consideration by every member of the House of Delegates as well as all of the members of the medical profession. Far too few physicians really appreciate the many constructive activities your medical society enters into to provide better health for its people, combat disease, prolong life, better living conditions, reduction of morbidity and mortality and the many unselfish contributions that the medical profession makes for the interest and welfare of the public.

Your Educational Committee has continued its untiring efforts to present information through talks, television and health education to the public. The work of this committee in its fight to reduce tuberculosis to a minor health hazard through the channels of organized labor, numerous women's groups and social agencies, combined with the Chicago-Cook County Committee for eradication of tuberculosis is most highly commended.

The part of the report referring to the National Educational Campaign against the socialization of medicine is most highly constructive. The regional conferences that were held among medical society officers and members with the proper selection of speakers to alert the public to the dangers of socialization of medicine, the resolutions condemning the compulsory insurance schemes have been most helpful.

Your Reference Committee commends the assistance given the Committee on Rural Medical Service in helping it to establish the joint student loan fund by the Illinois State Medical Society and the Illinois Agricultural Association.

Your Reference Committee is deeply appreciative of the very excellent medical service and public relations contributed by your President, Percy E. Hopkins, your President-Elect, Walter Stevenson, Dr. Everett Coleman, Dr. Harlan English, Dr. James H. Hutton, Dr. Edwin S. Hamilton, Miss Ann Fox, the members of the Council, your various county medical officials, the members of your medical profession, your lay groups, Mr. John W. Neal, Executive Secretary, and James C. Leary, Director of the Bureau of Public Relations. Each of these people individually and collectively working through many ramifications have implemented a great medical service and public relations program.

(Dr. PHIFER: I move the adoption of this portion of the report. Motion seconded by Dr. Fred Muller and carried).

DR. PHIFER: Concerning the supplementary report presented by the Committee on Medical Service and Public Relations, I would like our President, Dr. Hopkins to speak to this question.

THE PRESIDENT: Dr. Phifer and gentlemen: This represents a crystallization of the progress thus far in our contacts and conferences with organized labor. One of the difficult things with which the medical profession has been confronted has been contact with or an understanding of organized labor. We have been conferring with these people throughout the winter. The invitation came from them originally. They have taken up the cudgel with us on occasion when the reception was not perhaps as favorable as it might have been. We feel in the prepayment plan committee, the Committee authorized by the Council to meet with these labor people, that it is another possibility necessary to obviate the so-called need for compulsory health insurance. We are criticized quite frequently on the basis of being one of the twelve or fourteen states in which it is still not possible for a consumer-subscriber plan to set up its own insurance for private organizations. Labor has made considerable point of that. We have had to face that, as many of you men have, in the various debates and forums that have been conducted in the last several months. We feel this is the beginning. It may not be exactly what we like. It will provide for another supporter we hope. We have promised them nothing. This Committee of the Council does not determine the policy. The House of Delegates determines that. They understood from the beginning that we are speaking only for medical care and not for dental or hospital care. There is no delusion about it at all.

DR. PHIFER: Would Mr. Neal like to speak to this report?

JOHN NEAL: No.

DR. PHIFER: I move that the supplementary report of the Committee on Medical Service and

Public Relations be adopted. (Seconded by Dr. C. Paul White, Kewanee and carried).

The Report of the *Committee on Medical Testimony*:

The reference committee is deeply appreciative of the many controversial problems associated with the obligations of this committee.

We appreciate the constructive work they are doing in connection with coordinating their interests with the Chicago Bar Association, and the Judiciary. It is hoped that a better understanding and a workable program will be the solution of this problem.

One portion of the report states that a "Subpoena to appear before a lawyer for pretrial testimony should be carefully examined before responding to its demand".

In this connection it should be added that a physician, unless he is a party to the suit, is under no legal compulsion to respond to such a notary's subpoena, except where it is followed by or issued in accordance with an order of Court. But as a practical matter, if the doctor refuses to appear, or ignores the subpoena, he may later be compelled, through court order, to attend at a time and place most inconvenient to himself. In most instances, the wisest policy would probably be to first ascertain if the attorney is really determined to have the doctor's testimony, and if so to work out a time and place which will be mutually acceptable. And in giving such testimony, the doctor cannot be compelled, over his patient's objection, to reveal any confidential communication between the patient and himself. Also, the doctor need not give his opinion, as distinguished from purely factual data, unless he is called and compensated as an expert.

(DR. PHIFER: I move the adoption of this portion of the report. Motion seconded by Dr. A. M. Vaughn, Chicago and carried).

The Report of the *Committee on Medical Education and Hospitals*: Your Reference Committee notes the very excellent report of this committee, with its large amount of statistical data in regard to patient admissions, comments on increased cost of hospitalization, quality of hospital care, the role of hospitals in medical care, the section on general practice of the A.M.A. and the Academy of General Practice, the development of group practice, the nursing problem, health insurance, post-graduate medical education, the medical school problems, each of which is discussed in detail relative to questions pertaining to its own entity.

Your Reference Committee is of the opinion that the role of hospitals in medical education is a very important factor; each of these institutions should play a very important role in the educations of the intern and attending staff. The type and value of this training depends on the initiative and organization of such training. The tendency of some institutions to accept a larger number of interns than they can adequately train is a controversial problem. In the opinion of your Reference Committee a great effort should be made on the part of some of the hospitals which are having difficulty in obtaining interns to raise their standard of educational training, as well as to properly publicize

the type of training they offer. This will be a constructive aid in the equal distribution of interns.

Your Reference Committee notes in the comment on the Medical School Problem, the great need of a large private pavilion to take care of the private patients of its large part time clinical staff in reference to which your committee appreciates that many medical centers have such private pavilions. We also appreciate the advantages of the proximity of such institutions to universities as factors in conservation of time and energy of their medical staffs. While nothing is said in this report about how the funds would be provided for creating a building of this type, nor is the endorsement of Illinois State Medical Society requested. However, the question of building a private pavilion for the care of private patients on tax supported funds in connection with a tax supported medical university has long been a highly controversial problem. Your Reference Committee is of the opinion that these are individual questions, the approval of which must be withheld by your medical profession until the medical policy governing the operation of such contemplated institutions has been definitely defined by the university with which it is to be created.

(DR. PHIFER: I move the adoption of this portion of the report. Motion seconded by Dr. Richard Greening and carried).

The Report of the *Medico-Legal Committee*: Your Reference Committee is pleased to note the report of the Medico-Legal Committee. We most heartily endorse its recommendation. We ask the cooperation of the members of the medical profession in helping this committee discharge its objective.

(DR. PHIFER: I move the adoption of this portion of the report. Motion seconded by Dr. Bernard Klein of Joliet and carried).

The Report of the *Committee on Medical Benevolence*: Your Committee notes the excellent report of the Committee on Medical Benevolence. This activity of the society is greatly appreciated by those who have been required to call on its resources. It is the hope of this reference committee that the new procedure to require a reserve fund will provide adequate funds to administer this program. We most highly commend the activities of this committee to the membership.

(DR. PHIFER: I move the adoption of this portion of the report. Motion seconded by Dr. C. Paul White, Kewanee, and carried).

The Report of the *Committee on Archives*: We have reviewed the report of the Committee on Archives. We note the activity and the objectives of this committee. We commend this committee for its action and ask the membership for their assistance in aiding them on their assignment.

(DR. PHIFER: I move the adoption of this portion of the report. Seconded by Dr. B. E. Montgomery, Harrisburg, and carried).

Respectfully submitted, Charles H. Phifer, Chairman.
H. A. Felts, Richard Greening, L. S. Reavley.

DR. PHIFER: This report has been signed by Drs. Greening, Reavley, Felts and myself. I move the

adoption of the report as a whole. (Motion seconded by Dr. G. E. Johnson, Chicago, and carried).

THE PRESIDENT: Thank you very much for the report. The next report will be from Reference Committee "A".

Reference Committee "A" on Reports of Council Committees

Educational Committee: In reviewing the report of the Educational Committee, the members of this committee were amazed at the great amount of work done by this group; its many phases and ramifications directly affecting the dissemination of knowledge has produced results which are apparent to all of us.

Television which has been brought into use recently by this committee as a means of health education has great potentialities and we commend the committee for this approach to the contribution of public health information and earnestly recommend that it be continued-with close cooperation of men like Dr. Van Dellen and with the participating speakers the television should be the ideal means of reaching thousands with such information as we can and should give them — this especially since television is becoming so widely used.

Relative to the Speakers Bureau, the continued use is recommended. Persons who participated and cooperated are too numerous to mention. Acknowledgment of these endeavors and expression of appreciation are hereby given. Dissemination of news by Health Talk, Package Libraries and every other means should be encouraged.

We heartily commend the friendly relations with the Chicago Industrial Health Association and the close cooperation between the Chicago Medical Society. The Chicago Office of the Illinois Medical Society, as well as the Monmouth Office, and the personnel of all these groups without mentioning names are hereby given profuse thanks and expression of appreciation for their very earnest endeavors.

(DR. FREEMAN: I move the adoption of this portion of the report. Seconded by Dr. B. E. Montgomery, Harrisburg and carried).

Scientific Service Committee: The report of the activities of the Scientific Service Committee is accepted and gratitude and commendation extended to the committee and all who participated in the various programs. Speakers too numerous to mention gave willingly of their time and energy. The service of this committee enlarged and extended during the year. A joint meeting of the Scientific Service Committee and the Postgraduate Education Committee was held during which time two suggestions were made:

1. That a form letter be sent to all secretaries of county medical societies asking for pertinent information on meetings; this information is tabulated in the 1949 Official Annual Report of Officers and Committees for your perusal and information.

2. That a recommendation be presented to this House of Delegates to consider the fusion of the Scientific Service Committee and the Postgraduate

Education Committee under one committee and one chairmanship.

The committee recommends that this matter be referred to the Council for careful consideration and action.

(DR. FREEMAN: I move the adoption of this portion of the report. Move seconded by Dr. Bernard Klein, Joliet, and carried).

Post-Graduate Education Committee: It is unnecessary to point out to those of us who attended any of the Post-graduate Conferences that they fill a definite need and serve a real purpose in this State.

The Post-graduate Conferences have been most enlightening and educational and interesting and they are without a doubt a big factor in the scientific progress of a State Medical Society.

They have on the whole been well attended and those who failed to attend just missed a real treat and opportunity.

Too much praise and thanks cannot be given to this committee and to all the speakers who participated in these Conferences.

The committee recommends continuation of these Conferences as in the past.

(DR. FREEMAN: I move the adoption of this portion of the report. Motion seconded by Dr. B. E. Montgomery, Harrisburg, and carried).

Fifty Year Club Committee: The report of the Fifty Year Club Committee is wholly acceptable to the Reference Committee which is most favorable to the continued administration of it as in the past.

Commendation and appreciation from the Illinois State Medical Society is given to the Chairman, Andy Hall, and his Committee, and suggests that they continue their excellent administration of this endeavor.

(DR. FREEMAN: I move the adoption of this portion of the report. Motion seconded by Dr. Oscar Hawkinson, Chicago and carried).

Medical Economics Committee: The Reference Committee accepts the report of the Medical Economics Committee without any reservations or corrections and recommend that the Committee continue to follow the program of the past year.

In view of the existing political situation and the need of knowledge concerning our economy, we would encourage any furtherance of this information.

The usual gratitude is extended to this Committee and to Miss Ann Fox for her cooperation in this work.

DR. FREEMAN: I move the adoption of this portion of the report. (Motion seconded by Dr. B. E. Montgomery and carried).

Respectfully submitted, David B. Freeman, Chairman, Loren Mason, Harold Swanberg, James P. Simonds.

DR. FREEMAN: I move the adoption of the report as a whole. Motion seconded by Dr. Mather Pfeifferberger, Alton, and carried).

THE PRESIDENT: Thank you Dr. Freeman.

Report of Reference Committee "B"

Advisory Committee, Illinois Public Aid Commission: The Reference Committee feels that this report conveys to the House but a faint idea of the tremendous amount

of constructive work done by the Advisory Committee. However, in the discussion of the report it was brought out that the present method of paying medical claims confuses the doctors' bookkeeping and the patients' thinking. Consequently the reference committee recommends to the House of Delegates that it request the committee to use its good efforts toward having the I.P.A.C. simplify its method of paying medical claims. The report should be approved.

(DR. HUTTON: I move the adoption of this portion of the report. Motion seconded by Dr. C. Paul White, Kewanee and carried).

Constitution and By-Laws Committee. The Reference Committee feels that while the change suggested is one to be commended the amount of the change in dues would hardly warrant the expense entailed in changing our Constitution and By-laws and consequently recommends that no change be made.

DR. HUTTON: As a matter of explanation, the dues of residents in hospitals of \$7.50 a year. The Committee recommended that these be changed to \$5.00. The Reference Committee wondered if the expenses entailed in changing the Constitution and By-laws might not be greater than the amount received from dues. I move that this portion of the report be adopted. (Motion seconded by Dr. Mather Pfeifferberger, Alton).

DR. WARREN W. FUREY, Chicago: This recommendation for a change in the Constitution for a change in dues for residents is one to which we should be sympathetic. We are anxious to get in these men. There is a cost to carrying resident members. Most residents find that the charge of \$10 is definitely excessive. When we had \$5 dues we had a lot more young men than we now get. We must remember too that the G-I Bill is going to run out on some of these boys and they will have no income. I personally would recommend that the action of the Reference Committee be defeated.

DR. HUTTON: The Committee might change its mind. When we made our report we did not have the benefit of the information just given to the House.

THE PRESIDENT: Is there further discussion? Dr. Hutton's position is that the Committee has no feeling in the matter. Information has just been provided by Dr. Furey which they did not have at the time of the consideration of the report.

DR. C. PAUL WHITE, Kewanee: As a member of that Committee and with Dr. Hutton's consent I move that we adopt that report.

THE PRESIDENT: The motion is out of order, there is a motion before the House.

DR. WHITE: I am sure that as far as our Committee was concerned we did not know about the problem as it exists today. I think it was possible that we might have voted on the question as it is if we had had that information.

DR. HAROLD W. MILLER, Chicago: As another member of the Committee I would endorse what Dr. White has said. We had no information.

DR. HUTTON: In view of the information given to the House I would like to withdraw my motion to approve this portion of the Reference Committee's report, with the consent of the seconds.

DR. PFEIFFENBERGER: I withdraw my second.

THE PRESIDENT: There is nothing before the House.

DR. HUTTON: I would move that the report of the Committee on Constitution and By-laws be adopted as printed in the Handbook.

(Motion seconded by Dr. Harold W. Miller, Chicago, and carried).

Advisory Committee, American Academy of Pediatrics: This is a report of progress and the Reference Committee recommends that it be accepted as such.

(DR. HUTTON: I move the adoption of this portion of the report. Seconded by Dr. W. E. Kittler, Rochelle, and carried).

Committee on Prepaid Medical and Surgical Care Plans: We would call the attention of the House of Delegates to the fact that this Committee is engaged in the study of a highly important and very complicated problem. It has devoted a staggering amount of valuable time to this study. We can only recommend that the House approve this report and express its gratitude to the committee for the progress it has made. We recommend also that supplementary report be approved.

(DR. HUTTON: I move the adoption of this portion of the report. Motion seconded by Dr. I. H. Neece, Decatur, and carried).

Respectfully submitted, James H. Hutton, M.D., Chairman, C. Paul White, M.D., Harold Miller, M.D., R. E. Bedard, M.D.

DR. HUTTON: I move the adoption of the report as a whole as amended. Seconded by Dr. Karl Vehe, Chicago, and carried).

THE PRESIDENT: Thank you Dr. Hutton.

Report of Committee "C"

Committee on Cancer Control: This is a very complete, well-organized and well worded report and is typical of the thoroughness with which Dr. Warren H. Cole works and presents his material. The extensiveness of the cancer problem is very large, and it is fortunate that the Division of Cancer Control of the Department of Health and the Illinois Division of the American Cancer Society work so harmoniously together.

There are two phases of the Cancer Control program which we believe are of utmost importance and both of these are educational problems: 1. Public Education, 2. Professional Education. It is surprising how laymen will attempt to persuade other laymen to go to quacks even when cancer individuals have been induced to submit to examination after attending a cancer meeting. It takes a lot of lay education to overcome old superstition and dangerous ill-advised lay comment.

2. Professional education, especially the Cancer Symposium sponsored and expenses paid by the Cancer Society, is a splendid opportunity and is needed to make Doctors, cancer conscious. The Maxim of "Every

Doctor's office a cancer detection center" should be publicized more to the profession. This maxim should also be applied to tuberculosis.

The various publications are noteworthy, the movies are good, the extension work is commendable. We suggest the two divisions avoid overlapping, which we believe they have avoided so far very well.

(DR. FULLERTON: I move the adoption of this portion of the report. Seconded by Dr. Karl Vehe and carried).

Committee on Tuberculosis Control: The excellent work done by the Committee on Tuberculosis Control merits commendation.

It is recognized that tuberculosis is a public health problem, but nevertheless its management requires the closest cooperation between the family physician and the public health authorities. The physician must be constantly on the alert to locate the active cases. Thereafter economic barriers usually make necessary public aid. This committee has recognized and its recommendations for financial support of their program by the state seem entirely reasonable and equitably distributed except that the southern end of the state is critically short of beds for tubercular patients.

(DR. FULLERTON: I move the adoption of this portion of the report. Seconded by Dr. Karl Vehe and carried).

Advisory Committee to the Veterans Administration: This report is brief, explicit and to the point and brings out the usual complaint. There are probably some participating physicians who do not know there has been some changes in the fee schedule and perhaps if all participating physicians receive the new schedule, it would help to eliminate some of the misunderstanding on fees or maybe the secretaries when they receive the new fee schedules also be given a list of participating physicians so the secretaries could inform them of the existence of a new schedule. Otherwise, the complaints are probably the usual ones occurring when a pre-arranged fee schedule exists.

We as participating physicians should make every effort to be congenial, prompt and pleasant so that this arrangement will not be taken away from us.

(DR. FULLERTON: I move the adoption of this portion of the report. Seconded by Dr. Karl Vehe and carried).

Committee on Venereal Disease Control: The Committee reviewing "Report of the Committee on Venereal Disease Control", as submitted by Doctors Neece, Culver, Heckel and Wheeler commends these gentlemen on the comprehensive report they have presented.

Of particular significance are 1. the efforts of the Division of Venereal Disease Control in keeping the practising physician abreast with newer knowledge of therapy by means of the "Physicians Bulletin of Venereal Disease Control" and 2. by providing laboratory facilities to assist private physicians in following the therapy of their own patients serologically by quantitative tests.

The definite, but gradual, decrease in Venereal Disease rates reported is gratifying. This Committee

recommends that increased efforts be made by the Division of Venereal Disease Control to improve downstate hospital facilities so that diagnosis and evaluation of Venereal Disease cases may equal that of the special centers in Chicago and St. Louis.

(DR. FULLERTON: I move the adoption of this portion of the report. Motion seconded by Dr. Vehe and carried).

Committee on Military Affairs and Emergency Medical Service: This is a very important committee and its report requires almost a daily addition to keep it complete. Each county has a county chairman for this very important function. It is believed that close co-ordination is necessary between county units and neighboring state contacts in order to provide emergency care in case of a bombing attack or any great disaster. However, there has not been an official pattern for organization by a national authority.

A major disaster, such as an atomic bombing, would call for a system of emergency medical care coming from the periphery of the disaster as the medical service in the area of the disaster would be knocked out. Therefore the necessity of co-ordinated county and state units is obvious.

The problem of needed medical personnel in the military service is critical both from the standpoint of their need and also for our own public relations. Efforts to get the men who were trained in the A.S.T.P. and V-12 programs into military service have not been very fruitful. The methods that have been used are by means of correspondence, telephone and telegrams. It is hoped that personal interviews will be more productive. There are 459 of these men in Illinois, 42 are in 22 of the downstate counties, 417 in Cook County.

Louis Johnson, Secretary of Defense, has advertised in the metropolitan papers asking for enlistment of Doctors. It was learned Monday night that a bill has been written in Congress for a Doctor Draft and ready to be dropped into the legislative hopper at any notice. It is presumed that Mr. Johnson may wait for some two or three weeks on the enlistments and then the Draft Bill will be introduced.

This will stink and with the threat of socialized medicine, we certainly don't want this kind of unfavorable publicity.

It is the recommendation of this committee that:

1. Every effort must be made to get young doctors, especially those trained under the A.S.T.P. and V-12 programs into military service. These men have at least a moral obligation to the nation.

2. That the military service be contacted and urged to investigate the record of these men and find out what kind of men they are before there is any unfavorable publicity released.

(DR. FULLERTON: I move the adoption of this portion of the report. Seconded by Dr. Vehe).

DR. CHARLES H. PHIFER, Chicago: I think the Medical profession could do themselves a great deal of good at the present time if they would not condone the appointment of these people to residencies unless they have cleared with the Secretary of Defense and his office.

DR. P. R. BLODGETT, Chicago Heights: In the second recommendation I move that the Navy be contacted as well as the Army.

THE PRESIDENT: It is military services.

DR. PHIFER: I think at this particular time when we are signing up men for advanced residencies, if the hospitals that have residencies coming up will sign up and if the men on the Committee will bear that in mind it will give your Committee something to work on.

THE PRESIDENT: Are you ready for the question with this minor change in the report which is agreeable to the committee? (Motion carried).

Respectfully submitted, Willard W. Fullerton, Karl Vehe, Joseph Grandone, C. C. Saelhof.

DR. FULLERTON: I move the adoption of this report as amended as a whole. (Motion seconded by Dr. Phifer and carried).

THE PRESIDENT: Thank you Dr. Fullerton.

Report of Committee "D"

Committee on Rural Medical Services: Your reference Committee approves the report of the Committee on Rural Medical Service and we recognize the excellent work being done by this Committee and due to the great amount of unfinished business they have initiated, we recommend that the present personnel of this Committee be retained.

(DR. OLDFIELD: I move the adoption of this portion of the report. Seconded by Dr. I. H. Neece, Decatur, and carried).

Committee on Crippled Children's Clinics: Your Reference Committee accepts the statistical report of the Committee on Crippled Children's Clinics. It is suggested that because of occasional instances of care of private patients by the clinics without proper referral by the attending physician that an organized system for referring patients to these clinics be inaugurated.

DR. OLDFIELD: I move the adoption of this part of the report. Seconded by Dr. B. E. Montgomery, Harrisburg, and carried).

Committee on Industrial Health: Your Reference Committee accepts the report of the Committee on Industrial Health with the following suggestion — that insurance policies be so worded that the insured patients are not afforded a sense of false security as to financial assistance.

(DR. OLDFIELD: I move the adoption of this portion of the report. Seconded by Dr. A. E. Dale, Danville, and carried).

Maternal Welfare Committee: Your Reference Committee accepts the excellent report of the Maternal Welfare Committee and commends them for the excellent work being done by this committee.

(DR. OLDFIELD: I move the adoption of this portion of the report. Motion seconded by Dr. Robert Hayes, Chicago and carried).

Respectfully submitted, R. C. Oldfield, M.D., Chairman, Justin McCarthy, M.D., A. E. Dale, M.D., J. P. FitzGibbons, M. D.

DR. OLDFIELD: I move the adoption of the report as a whole. (Motion seconded by Dr. A. E. Dale, Danville, and carried).

THE PRESIDENT: Thank you Dr. Oldfield. The next report will be from the Reference Committee to receive and report on Report of Editor, Committee on Scientific Work, Woman's Auxiliary, Advisory Committee to the Woman's Auxiliary. Dr. B. E. Montgomery will present the report.

Report of Committee on Report of Editor, etc.

Report of Editor: This Committee wishes to commend the Editor for his fine work in maintaining the high standards of the Journal. We would like to emphasize the necessity of all contributors to keep their papers within reasonable length and to follow the instructions of the Editor with reference to long bibliographies and historical information.

We are pleased to note that Dr. Theodore R. Van Dellen has taken over the Assistant Editorship and has evidenced new and useful ideas for the further improvement of our State Journal.

There is no doubt but that the brevity, readability and format of the Journal increases its value to all readers.

This Committee wishes to recognize and express its deep appreciation to Dr. Camp for his long, faithful and highly competent service as Editor of the Journal, and it is with pleasure that we now note that he has an assistant with whom to share his work.

(DR. MONTGOMERY: I move the adoption of this portion of the report. Seconded by Dr. Bernard Klein, Joliet, and carried).

Committee on Scientific Work: This Committee is of the opinion that the organization, presentation and content of the Scientific program is evidence of a lot of hard work and thought on the part of the Committee on Scientific Work. The program is well diversified and the Scientific movies are well chosen. The Scientific exhibits cover a broad field of medical subjects and are well selected and arranged.

We would like to recommend that the same type of well diversified and interesting Scientific Program and Exhibits be maintained and presented at the next annual meeting.

The Committee on Scientific work is to be most highly commended for its fine work in the preparation and presentation of this fine program.

(DR. MONTGOMERY: I move the adoption of this portion of the report. Seconded by Dr. Robert H. Hayes, Chicago, and carried).

Woman's Auxiliary: The Committee recognizes and commends the Woman's Auxiliary to the Illinois State Medical Society for its very active and important work during the year. Particular credit is due the women for their activity against Compulsory Health Insurance. Since the battle against Political Medicine will continue through forthcoming years we would recommend, for this as well as other reasons, that more medical societies increase their auxiliary activities, so that those County or Branch County societies that have none organized do so at their earliest opportunity. Certainly, the excellent work of the Woman's Auxiliary in its many contacts has greatly strengthened County medical and State effectiveness, and its work cannot be over-extended.

(DR. MONTGOMERY: I move the adoption of this portion of the report. Seconded by Dr. Robert H. Hayes, Chicago).

DR. D. B. POND, Chicago: In the absence of the immediate past President, Mrs. Hamm, she wishes a supplementary report made to the House of Delegates. She reports that \$1,241 was turned over to the Benevolence Fund. Up to this time \$3500.14 has been turned over to the Fund. In regard to organization, four new counties have been organized, Crawford, Mercer, McLean and Dekalb.

THE PRESIDENT: Thank you Dr. Pond for your informative discussion of Mrs. Hamm's report. (Motion carried).

Advisory Committee to Woman's Auxiliary: The report of this Committee indicates that the Woman's Auxiliary has been very active during the past year.

Our recommendation is that the Society, through its Advisory Committee, continue its close relationship with the Woman's Auxiliary and attempt, in every way possible, to encourage and assist them in the organization of more new County groups, and in their fine public relations work in bringing the fight against political medicine to the various lay groups of their communities.

It is noted with regret that at present there are only 22 organized Counties in the Auxiliary. This Committee would earnestly recommend that concerted effort be made to organize the remaining 79 Counties that have no organization whatsoever.

Your Committee feels that the Advisory Committee to the Woman's Auxiliary should contact each County Society and urge concerted action with reference to the organization and expansion of our Woman's Auxiliary.

(DR. MONTGOMERY: I move the adoption of this portion of the report. Seconded by Dr. Bernard Klein, Joliet).

DR. H. K. SCATLIFF, Chicago: If I may be pardoned for mentioning the subject a little farther, there are certain counties where there are not enough doctors' wives to form an Auxiliary. In line with the recommendation the Chairman has made, I would like to state that all these counties have been contacted and those counties in which there are too few doctors' wives these women are received as members at large. There are ten or twelve so designated. They propose to cover the field in that way.

DR. C. PAUL WHITE, Kewanee: I think in the downstate societies you could very well encourage your Woman's Auxiliary if on the night of your meeting you had the women meet with you for dinner. That has been followed in our Society which has two counties, Henry and Stark. In Stark County they have not enough members to constitute a working group. This plan has worked out fine. The women like it and it helps to get the doctors out. We have dinner and then the women retire to someone's house for their meeting. They have a very definite program scheduled for the year just the same as we have. This is just offered as a suggestion on how some of your

downstate societies may increase the effectiveness of your Woman's Auxiliary. We find in Henry and Stark counties they have really done a fine piece of work. (Motion carried).

Respectfully submitted, B. E. Montgomery, Chairman, Charles Pope, A. J. Zmugg, Harry Dooley.

DR. MONTGOMERY: I move the adoption of the report as a whole. (Motion seconded by Dr. Bernard Klein and carried).

THE PRESIDENT: The next report is from the Reference Committee on Miscellaneous Business, Dr. T. G. Knappenberger presenting the report.

Reference Committee on Miscellaneous Business

Report of Committee on Mental Hygiene: We feel that the substance of this report is of such vital interest and importance to both the public and the Medical Profession that the Committee should be continued. We so recommend to the Council.

(DR. KNAPPENBERGER: I move the adoption of this portion of the report. Motion seconded by Dr. B. E. Montgomery, Harrisburg, and carried).

Committee on Nutrition: We recommend to the Council that this report be accepted.

(DR. KNAPPENBERGER: I move the adoption of this portion of the report. Motion seconded by Dr. Karl Vehe and carried).

Committee on Medical History: We wish to commend this Committee for the tremendous amount of time and effort put into their study — we especially liked their scholarly and classified approach to the whole subject. We recommend to the Council that it be allowed to continue its service to the Society.

(DR. KNAPPENBERGER: I move the adoption of this portion of the report. Seconded by Dr. Richard Greening and carried).

Advisory Committee to the State Commission on the Chronically Ill: We feel that this Committee has its problem well in hand and recommend to the Council that the same Committee be re-appointed.

(DR. KNAPPENBERGER: I move the adoption of this portion of the report. Seconded by Dr. Karl Vehe and carried).

Respectfully submitted, T. G. Knappenberger, Acting Chairman, Robert McCready, G. F. Cummins, Joseph Mullen.

(DR. KNAPPENBERGER: I move the adoption of the report as a whole. Seconded by Dr. Robert Hayes, Chicago, and carried).

THE PRESIDENT: The next order of business will be the report of the Committee on Resolutions to be presented by Dr. G. Henry Mundt.

Report of Committee on Resolutions

A Solution for the Problem of Increasing the Availability of Medical Care.

"Resolved, that the Illinois State Medical Society hereby reaffirms its belief that the best solution for the problem of increasing the availability of medical care is to be found through continuing expansion with voluntary and competitive prepayment plans, sponsored by non-profit as well as by commercial insurance companies, consistent with the highest standards of medical practice."

DR. MUNDT: One member and another interested individual appeared before the committee to discuss this resolution. They were slightly disturbed because we wished to reaffirm a statement previously affirmed by the House of Delegate. Your committee sees no objection to reaffirmation. However, if it is the opinion of the House that we should not reaffirm but stand on our previous action, the committee will not be dissatisfied.

I move the adoption of this portion of the report. (Motion seconded by Dr. Walter Hammond of Chicago).

DR. THOMPSON: The word "expansion" in the resolution was "experimentation" in the original resolution.

DR. MUNDT: We recommended the substitution of the word "expansion" for "experimentation".

THE PRESIDENT: That does not change or alter the report of the Committee whatsoever. (Motion carried).

Objection to Method of Payment for Medical Service to Recipients of Old Age Assistance and Aid to Dependent Children.

(See page 76, July issue.)

DR. MUNDT: Your committee agrees in principal with the spirit of the above resolution. However, there are two propositions which we must consider. First, that the method of payment in vogue is dictated by federal law. This would doubtless be difficult if not impossible to change. Second, there is the question that if it were changed so that the federal government paid directly whether it might not be construed as a type of federal or socialized medicine. Your committee recommends that this be referred to the Council with power to act. I move that this resolution be referred to the Council with power to act. (Motion seconded by Dr. B. E. Montgomery, Harrisburg).

DR. HARRY PHILLIPS, Anna: Those of us from the rural communities are all faced with the same problem. Our county represents a small percentage of physicians but the surrounding counties are continuously hammering away at this. We share the sentiments brought out by Randolph County. There are a great many unpaid bills tacked up against a blank wall. They are clamoring for State Medicine. It is true one way to get aid to these individuals and to avoid the claim that the physicians do not give them service is to pay the doctor directly. There are a lot of night hours, the roads are bad, they live in back of the hills and these individuals when it comes to pay are not there. I think this resolution deserves consideration. We should give it consideration whether it comes direct from Washington or we get it through the state. I do not know what the answer is but some consideration should be given.

DR. C. PAUL WHITE, Kewanee: As representative from Henry County, it has been my privilege or duty to be Chairman of our County Public Aid Committee since its inception. Dr. Hutton's Committee

noted that there was some trouble in collecting this money. We had this in mind and expected to take it up with Dr. Coleman. We too desire that this resolution of Dr. Hutton's Committee be adopted because it is impossible to change the law in the matter of payment for these visits. I am sure that we must be consistent. We do not want the government entering directly into relationship with the doctor in any phase and I should say let the federal or state agents get their foot in the door by paying us directly for these indigents or public aid assistance patients and they will eventually finish the job of socializing our profession. Our idea was this. I have looked into this matter considerably and have been told that the Commission did not get this money allocated in large amounts; we do believe it is possible for those that are paying the bills to reorganize their economy in such a way that instead of submitting these bills from month to month for the balance the patient may owe, that the bills be paid regularly. Suppose the patient gets a bill for \$25 and it is unpaid for a period of three months; during that three months there is another bill for a broken arm or some medical care, and then there is another bill; that adds to the confusion which Dr. Hutton referred to. It adds to the confusion of the recipient of the money. It likewise adds to the confusion of the bookkeeping in your office. We favor the recommendation in the motion of Dr. Hutton that some effort be made by Dr. Coleman and his Committee to try to get the bills paid to date after they have been properly endorsed by the Committee in your local Society. If that were done then it would simplify the matter of your clearing your bills and you would know where you stand at the end of the month if these recipients did not come in to pay their bills. Then I would remind you to call your Public Aid office and state that those bills are not being paid. The case worker on that case is duty bound to go to the recipient and say to him that he has to pay the doctor's bills, or to see that some effort be made to collect them. As that is a more or less set up procedure, it seems to me that we would simplify this whole matter if we were able through Dr. Coleman's Committee to take care of it. I want to say he has done much to simplify the work of the doctors and to take care of the profession in his relations with the Public Aid Commission. I think he and his Committee can well do a great deal more in helping us. I believe particularly that it would satisfy most of us if we knew that these people who get this money get the full amount for the bills they are to pay rather than get a staggered amount over a period of months. That seems to be what muddles up the thinking of the patient because they hardly know where they stand, for likewise they are getting a little extra money for a bottle of olive oil or a pair of glasses. We cannot expect our own problem to be the only one. I do believe that Dr. Coleman and his Committee can take care of it.

DR. MUNDT: The Committee approved in principle. I want to call your attention to the fact that we asked the resolution be referred to the Council with power to act. (Motion carried).

*Poll of Members of the State Society as to their
Position Concerning Compulsory Health Insurance*

(See page 76, July issue.)

DR. MUNDT: Your Committee is of the opinion that a poll such as is proposed in the above resolution may be desirable. There is some question, however, as to whether the information gained will be worth the effort and cost of conducting the piece of research.

There is some question in the minds of the committee as to the method by which the poll should be conducted, whether by mail with return cards or by the secretaries of the less populous counties conducting the poll and reporting to the Illinois State Medical Society.

Your committee recommends that this resolution be referred to the Council with power to act. I move that this portion of the report be adopted. (Motion seconded by Dr. Robert Hayes, Chicago).

DR. MATHER PFEIFFENBERGER, Alton: Are we not taking a poll now by our \$25 payment?

(Motion carried).

Salary of Director of Department of Public Health

(See page 75, July issue.)

DR. MUNDT: Your committee recognizes the desirability of passing the above resolution and so recommends. We further recommend that the Council be urged to follow through on this action. I move the adoption of this portion of the report. (Motion seconded by Dr. Karl Vehe, Chicago, and carried).

DR. MUNDT: Concerning the resolution presented from the Illinois State Dental Society this morning stating that the Illinois State Dental Society memorialize the Congress of the United States not to enact any legislation which would in any way interfere with the progressive development of medical and dental care, we recommend that the Secretary acknowledge the receipt of the resolution and express our appreciation, that we advocate the passing of the same resolution and we ask our Secretary to edit the resolution if needed. I move the adoption of this portion of the report. (Motion seconded by Dr. B. E. Montgomery, Harrisburg, and carried).

DR. MUNDT: This report is made by Drs. P. C. Rumore, Walter Hammond, J. Eric Gustafson and G. Henry Mundt. I move the adoption of the report as a whole. (Motion seconded by Dr. Bernard Klein and carried).

THE PRESIDENT: I am grateful to you gentlemen of the committees for your work and it is work. It requires a lot of time to consider these reports intelligently and to report on them. We are grateful to you for your cooperation.

There is no unfinished business so we will pass to new business.

DR. W. E. KITTLER, Rochelle: A few months ago Logan County adopted a resolution to send a letter to the President of the United States, the Senators and the Congressmen of each District concerning the National Health Insurance. I have a letter from representative Leo I. Allen acknowledging the resolution, which is favorable to the thinking of the medical

profession. Our Secretary wrote to each of the above named men and also to each individual member of the Society to urge them to write. I feel that since Congressman Allen was kind enough to answer the letter I would like to make a motion that this House of Delegates request our Secretary to acknowledge this letter either by telegram or letter. (Motion seconded by Dr. J. Eric Gustafson, Stockton, and carried).

DR. H. K. SCATLIFF, Chicago: I would like to include any other letters from Congressmen that have been received.

THE PRESIDENT: Will you consider that in the original motion, Dr. Kittler instead of having to act on the amendment?

DR. KITTLER: Yes.

(Motion was carried).

THE PRESIDENT: Under new business the Chair recognizes Dr. Hutton.

DR. HUTTON: The House has been told about three tuberculosis bills S-360, 361, 362. These provide for the erection of three 250 bed hospitals, two in Chicago and one downstate; \$6,000,000 to assist local sanatorium boards, and \$1,000,000 to assist in the repair and rehabilitation of existing facilities. At a recent conference Gov. Stevenson told representatives of The Eradication Committee that money would not be appropriated for the building of hospitals and that only \$5,000,000 could be allocated for the assistance of local sanatorium boards and \$1,000,000 for repairs, etc. This, of course, is quite disappointing particularly in view of the fact that the Senate recently passed a bill appropriating over \$6,000,000 for the erection of a cancer hospital. Cancer is still in the research stage. We know much less about it than we do about tuberculosis. I wonder if we should not send the Governor a letter, pointing out that if the state had plenty of money it would be nice to build hospitals for cancer, alcoholism, etc., but that until the state does have more money it should concentrate on its most urgent needs and on those things we already know how to do. Tuberculosis is a contagious disease and the State's No. 1 public health program. Therefore, adequate hospitals should be built to take care of its victims before the state takes on other projects. I move that this House of Delegates direct the Secretary to send the Governor a letter embodying these ideas. (Motion seconded by Dr. J. Eric Gustafson, Stockton and carried).

THE PRESIDENT: I now recognize Dr. Richard Greening.

DR. GREENING: Dr. Bornemeier has asked me to submit this matter to the House of Delegates:

Since the officers, Councilors and Chairmen of certain committees are privileged to render reports annually for publication in the Handbook — I move that the delegates from the State of Illinois to the A.M.A. also submit reports for publication, each delegate and/or alternate submitting an individual report, and the Chairman of the delegation reporting for the

whole, such reports to be then referred to a separate reference committee for review and report.

(Seconded by Dr. Karl Vehe, Chicago, and carried).

THE PRESIDENT: The Chair asks the privilege of the floor for Dr. A. J. Sullivan.

DR. SULLIVAN: I want to make a plea for the recognition and endorsement of the Association of American Physicians and Surgeons.

(Dr. Sullivan gave an interesting story of the organization, functions, and achievements of the Association of American Physicians and Surgeons, organized in 1943, and which has enjoyed a steady growth to the present time. He stated that to date, some 14 state medical societies and nearly 200 county societies have endorsed the organization and its program. He urged that the Illinois State Medical Society likewise give its approval to the Association's principles and objectives.)

DR. C. PAUL WHITE, Kewanee: I move that it be given to the Council with power to act. (Motion seconded by Dr. Robert Hayes, Chicago).

DR. JOHN WALL, Chicago: I think this gentleman made a plea. If we are going to take any consideration of this thing it should be done now. I would like this discussion to be taken up.

(Motion carried).

DR. H. M. HEDGE, Chicago: We are to have a meeting of the Council after the present meeting has adjourned.

Concerning the appointment of Dr. Roland R. Cross as Director of the Department of Public Health, Governor Stevenson has indicated that if we receive approval from the House of Delegates he would forthright immediately see that the appointment is made. I would appreciate very much if such a letter be sent.

DR. A. M. VAUGHN, Chicago: I move that such a letter be forwarded to the Governor. (Motion seconded by Dr. Robert Hayes, Chicago, and carried).

THE PRESIDENT: Do you wish to take any action regarding the World Medical Association referred to in the letter of Dr. Louis Bauer?

DR. P. R. BLODGETT, Chicago Heights: I move that it be referred to the next House of Delegates. (No second).

DR. G. H. MUNDT, Chicago: I move that the House of Delegates approve the World Medical Association and that the membership of the Illinois State Medical Society be encouraged to join this World Medical Association. (Motion seconded by Dr. B. E. Montgomery, Harrisburg, and carried).

DR. HAMILTON: I would like to meet with the members of the House of Delegates of the A.M.A. who are going to meet in Atlantic City next month. I have something very urgent to take up.

DR. G. H. MUNDT, Chicago: It is customary after each meeting that the Secretary be authorized officially to thank all the groups who participated in making this unusually good meeting. (Motion seconded by Dr. Robert Hayes, Chicago, and carried).

THE SECRETARY: I have the following list of candidates for Emeritus membership:

Rollo E. Little, East St. Louis, St. Clair County
Anson L. Nickerson, Kankakee, Kankakee County
Joseph A. Guertin, Kankakee, Kankakee County
John R. Pollock, Quincy, Adams County
William W. Williams, Quincy, Adams County
William G. Turney, Shelbyville, Shelby County
Robert E. Gordon, El Paso, Woodford County
F. W. Blatchford, Virgin Islands, U.S.A., Chicago Medical School

Matthew Evertz, Riverside, Ill., Chicago Medical School

H. F. Langhorst, Elmhurst, Du Page

Thomas E. Cherry, Cowden, Shelby County

DR. P. R. BLODGETT, Chicago Heights: I move that they be elected. (Motion seconded by Dr. Robert Hayes and carried).

THE SECRETARY: I have the following applicants for past service membership:

Robert K. Campbell, Springfield, Sangamon County
Graham M. Lisor, Elgin, Kane County
Irvin S. Koll, Chicago, Chicago Medical School
William P. Schoen, Chicago, Chicago Medical School
Otto Schwartz, Hollywood, Calif., Chicago Medical School

(DR. BERNARD KLEIN, Joliet: I move that they be elected. (Motion seconded by Dr. B. E. Montgomery and carried).

THE SECRETARY: I have a recommendation from the Warren County Medical Society for Honorary membership for Dr. Frank C. McClanahan who is a medical missionary in Assiut, Egypt. He has been a member of this Society, a Fellow of the A.M.A., a Fellow of the American College of Surgeons and said to be the outstanding surgeon of the whole of Egypt. He is a member of my own County medical society. He is a brother of Dr. Victor A. McClanahan who is a member of this House. In the By-laws such action requires a nine-tenths vote of those present.

DR. W. E. KITTLER, Rochelle: I so move. (Motion seconded by Dr. E. H. Weld, Rockford, and unanimously carried by a standing vote).

THE PRESIDENT: Thank you very much gentlemen for your patience and indulgence. It is now my pleasure to perform a happy task. I am going to request the new President-elect of the State Society to escort Dr. Walter Stevenson to the rostrum.

Dr. Stevenson, it is a pleasure to install you as President of the Illinois State Medical Society and to hand you this gavel which is a priceless possession of the Society. May I assure you the support of the entire State Society membership.

DR. WALTER STEVENSON: Dr. Hopkins, Chairman, ladies in the rear of the room, members of the House of Delegates and guests: When I first became active in the so-called official family of this great Society little did I realize or even dream that when I was to be laid on the shelf of the Society's antiques that I would be there as an ex-President of

the Society. I have accepted this great honor with deep humility first, because I can not hope to successfully fill the shoes of my distinguished predecessors, and both the immediate and ex-presidents and secondly, because the coming year portends serious and even dangerous forebodings to the private practice of medicine. Those who would destroy the liberties and freedoms that we have had passed on to us have been knocking on legislative doors for years and too few of us have realized that they would destroy human liberties. Now at long last the profession is aroused, because we know we have done a great job for the American people. We have done this selflessly and sincerely in the desire to provide the people of this great nation with what we know is best for them. Our motto has always been, what is best for them is best for us and nothing is too good for either of us. Never has our profession opposed anything that will redound to the eradication of the ills that humans are subject to. More

than that, the profession has finally realized that their many efforts as sincere as they have been have not been fully appreciated by a certain cross-section of this country. We have done a great job for the American people and we now intend to advertise our achievements. I love my profession and I live it twenty-four hours a day. I am proud of it. I am proud to be a doctor of medicine. I deeply appreciate the honor I am accepting. I hope I will not fail you. You must realize that with your help I will give you my all and do my very best for all of you. I want to thank you very, very much. (Applause).

THE PRESIDENT: Is there any other business to come before this House?

DR. W. O. THOMPSON, Chicago: I move we adjourn *sine die*. (Motion seconded by Dr. Robert Hayes and carried).

The House of Delegates adjourned *sine die* at 12:55 P.M.

VALUE OF AN ANNUAL EXAMINATION

In this age of specialization, streamlined offices, and super drugs, it might be well for all doctors to remember that the patient is primarily looking for understanding and security as well as relief from physical distress. An inquisitive mind, proper use of the five senses, and sufficient time to allow their proper use, is still the essence of good diagnosis. An annual health survey offers to the patient the re-assurance of the continued interest of the doctor in the future of his health. Both the internist and general practitioner can offer this type of service to their patient and in doing so will make a significant contribution to the practice of American medicine.

Excerpt, An Annual Examination for Your Patient, Robert B. Marin, M.D., Montclair, N. J., The Journal of the Medical Society of New Jersey, June, 1949.

BOOKS, AND CIVILIZATIONS' FOUNDATIONS

The entire library, including the archives, at Louvain, Belgium, was destroyed. —200,000 books at the University of Rangoon; untold millions of books in China, two and one-half million books destroyed in France; 250 libraries in Italy; over seven million books burned in Poland, and thus the story of the burning of the books and confiscations of the basic skills of progress around the world. The foundations of our civilization have never been truly broad, now even large portions of these foundations have crumbled. Indeed we must strengthen the wall if the whole building is not to collapse.

Excerpt, Tools for Tomorrow's Civilization — Educational Reconstruction Abroad, Bulletin of the American College of Surgeons, June, 1949.

COUNCIL MEETING MINUTES

The regular June reorganization meeting of the Council was held at the Palmer House, Chicago, on Sunday, June 12, 1949, with the following present: Stevenson, Hedge, Hoeltgen, Camp, Hughes, O'Neill, Stone, Harker, Hawkinson, Vaughn, Saunders, Bornemeier, Peairs, Blair, Hulick, English, Lane, Otrich, Hamilton, Berghoff, Neece, Hopkins, Cross, Scatcliff, Neal, Leary and Frances Zimmer.

Minutes of last meeting approved as mailed to members. Chairman Hawkinson introduced new member Bornemeier, and called to attention of Council, reelection of Saunders, Blair, Peairs, Hulick and English for three year term.

Secretary gave usual report, telling of recent AMA meeting held in Atlantic City, stating that as requested by House of Delegates at our own annual meeting, next year in the hand book there will be a published report from the Delegates to the AMA from this Society. Final copy to be submitted by Charles H. Phifer as chairman of the Illinois delegates.

Attention called to the registration at our annual meeting in Chicago during May; overall registration, 3,606; 2,506 physicians, 443 exhibitors and 658 guests. Called attention to desire of House of Delegates for a downstate meeting in 1950. Springfield apparently only city outside of Cook County which might have the necessary facilities, and these to be investigated within the next week.

The Auditor's report was presented by the Secretary, and the usual financial report of the treasurer was presented. Hamilton, as chairman of finance committee, discussed the reports, calling attention to the fact that more money was spent during the past two years than ever before, this being necessary as our part of the national educational cam-

paign, new activities which were essential, etc. Believes money should be spent wisely, and when necessary, should not hesitate to use funds from the accumulated reserve. Recommended that salaries of all employees and honorariums remain same as for the past year.

Stevenson reported as president, telling Council of the Annual Conference of Presidents and other State Society officials which he attended in Atlantic City. Necessity for county societies throughout the country to continually stress the importance of furnishing all emergency medical care, continuance and increasing medical public relations activities, were emphasized at this conference. Told of three outstanding English physicians who addressed the group, as well as at other sessions during the meeting, and their expressions that they hoped the United States would never follow Britain's footsteps and develop a National Health Service similar to the British plan were most appealing.

Individual Councilors gave short reports.

Vaughn told of a letter from Thomas Hull in charge of the AMA Scientific Exhibit, in which he congratulated the Illinois State Medical Society for the outstanding Scientific Exhibits at the recent annual meeting, under direction of Dr. Coye C. Mason. Similar reports had been received from distinguished guest speakers from the East Coast, West Coast, South, and several other parts of the country. Believes the Society should encourage the continuation of the splendid scientific exhibit as part of the annual meeting.

Work of the Medico-Legal Committee was briefly outlined by Hawkinson, following a question asking what services were now being given by the committee to members threatened with alleged malpractice suits.

Hawkinson, as Chairman of the Council, read the long list of committee appointments, these presented by the Chairman and subject to Council approval. Motion, Hedge—Saunders, that same be approved, motion carried. Motion, Saunders—Hamilton, that Harold M. Camp be elected as editor for the Journal for the next year. Carried. By proper action, all salaries and honorariums were placed at the same rate as for the past year. Likewise appropriations for activities of several committees were set at the same rate as for the past year.

Hopkins told of recent activities of the Committee on Medical Service and Public Relations, emphasizing his request that early arrangements be made for setting up instruction courses for speakers throughout the state. Desires to start in late summer or early fall. Told of some of the things the committee has in mind for the next half year.

Neal told of what has been going on in the state legislature relative to the interests of medical profession. Promised a bulletin following the close of the legislative session.

Leary told the Council what has been done in his office at 185 North Wabash Avenue since the previous meetings. Some 250,000 pamphlets have been sent out in addition to many hundreds of the sets of cards which he prepared for speakers. He has been working on copy for some county societies desiring to use the press carrying a series of advertisements, with a radio tie-up as a part of the program in one county particularly.

Hopkins also reported as chairman of the Committee on Voluntary Prepayment Care Plans, reporting on a recent meeting with the AMA Council on Medical Service. The main item for consideration was the increased enrollment of members under any and all approved form of voluntary prepayment plans for medical and surgical care. Referred to the recent action of the State Society's House of Delegates which approved the expansion of the Illinois Plan, as well as the service type of coverage such as is offered by the Chicago Medical Society Plan. Several counties outside of Cook are considering or now developing plans to use Blue Cross as selling agency.

Blair reported as chairman of the Educational Committee, stating that six months of health education on television had been completed, and his committee was most enthusiastic on this project. Referred to increasing interest in *Health Talk*, and Blair gave assurance that his committee desires suggestions and criticisms at any time.

The report of Frank G. Murphy, as chairman of the Crippled Children's Clinic Committee was read by the Secretary, as it was received too late to appear in the hand book. His committee held a meeting during the annual session, and it was their desire to avoid as much as possible, duplication of effort on the part of the

several agencies now conducting crippled childrens clinics in Illinois.

There was a general discussion of procedure to be followed relative to the selection of the outstanding general practitioner, emphasizing this year the fact that it is desirable to select men from the respective counties who have given outstanding services to their communities over a period of years, rather than services during the past year.

Secretary was instructed to send this information to the component societies as soon as possible, as all applications for the outstanding general practitioner for individual counties should be in the hands of the Secretary not later than October 1st.

The following members were elected to Emeritus Member status following receipt of request from their respective county societies: F. C. Hamilton, Kankakee; L. A. Burhans, William Cooley, Charles G. Farnum, W. A. Hinckle, George W. Parker, and H. M. Sedgwick, all of Peoria.

The following by proper action were elected to Past Service Membership: R. G. Scott, Geneva, and C. E. Mayes, East Moline State Hospital.

Motion; Hughes—Lane, that bills as audited by finance committee be approved. Motion carried.

Around the luncheon table, Vaughn stated that it was quite probable that the outstanding case reports from Cook County Hospital would be received in the near future for publication in the Illinois Medical Journal.

Blair, as the only member of the Committee on Medical History present, told of the research work being done by Miss Salmonsens and her assistants. This phase of the work will be completed in the near future.

Cross told of recent activities in the health department, and referred to some bills in which the department is interested. Complimented Neal for some fine work done recently in his responsible position with the Society.

Scatlift reported as representative from this Society to the "Grass Roots" Conference held in Atlantic City Sunday, June 5. His report appeared in the July, 1949, Illinois Medical Journal.

Correspondence was referred to the Council, letters from Earl E. Kleinschmidt, associate professor of preventive medicine, University of Illinois College of Medicine, E. H. Ochsner, and from the Section on Radiology. These received careful consideration by the Council.

Council authorized the Secretary, Frances Zimmer and Coye C. Mason to go to Springfield and make thorough investigation of facilities available for a good annual meeting in 1950, and report to the Council with recommendations by mail. A motion was made and approved that the 1950 annual meeting be held in May, and preferably a Tuesday-Wednesday-Thursday meeting.

Meeting adjourned at 2:30 p.m.

Harold M. Camp, M.D., Secretary

PATHOLOGY CONFERENCES

EDWIN F. HIRSCH, DEPARTMENT EDITOR



Primary Carcinoma of the Ethmoid Sinus

Kane Zelle, M.D.
Springfield

Many reports on carcinoma of the nasal and paranasal structures have been published. Those covering a large series of cases are concerned chiefly with therapy or clinical manifestations and have given little or no consideration to the pathology. When reports of carcinoma of a cranial sinus, such as the ethmoid are reviewed, difficulties are encountered because at the time most of the patients presented themselves for examination to a physician, or when the post-mortem examination was made, local extension had occurred so that the sinus of origin of the tumor could not be established beyond doubt. Greschickter¹ has stated that the majority of carcinomas of the nose arise in the middle turbinate region at the embryonic site of the out-pouching of the sinuses. The antrum of Highmore soon is invaded by carcinomas primary in the nasal cavity, the ethmoid or extra-sinus tissues. Ringertz² in reporting on 281 carcinomas

of the cranial sinuses found that the ethmoid was involved in 43.1 per cent, the cavum nasi in 49.1 per cent and the antrum of Highmore in 86.7 per cent. Of this large number of carcinomas involving the ethmoid, only one was confined to the single sinus without evidence of local extension. This patient had a squamous cell carcinoma with metastases to the cervical lymph nodes.

Reviewing the work of many authors, Ringertz found three generally recognized histologic forms of nasopharyngeal carcinomas: (1) cylindrical cell, (2) squamous cell, and (3) undifferentiated cell. The last group of anaplastic tumors was designated "Schneiderian carcinoma" by Ewing because the characteristics of the cells of origin are not duplicated by those in other regions. Ringertz added a fourth classification, the adenocarcinomas. In the 27 solid cylindrical cell carcinomas of his report most of them involved the ethmoid, the nasal cavity, and the antrum of Highmore, except four where the

From the Henry Baird Favill Laboratory of St. Luke's Hospital, Chicago.

growth was confined to the ethmoid and the antrum. Five had regional lymph node metastases and two distant metastases. All of the ten adenocarcinomas involved the ethmoid, antrum, and nasal cavity. There were no metastases. In twelve undifferentiated cell carcinomas, nine involved the ethmoid, usually with extension into the nasal cavity and antrum. Four of these had associated metastases in the regional lymph nodes and one in the mediastinum.

Meyer³ reported two carcinomas of the ethmoid, both confined to that sinus. One had arisen in the right lamina cribrosa. Watson⁴ in a series of 127 carcinomas of the paranasal sinuses found seven carcinomas of the ethmoid, three with metastases. Barnes⁵ reported six tumors in which the ethmoid alone was involved, and eighteen more in which there was extension into the antrum and sphenoid. He stated that probably most of the second group arose in the ethmoid. There were metastases in the brain, dorsal vertebrae, and the bones of the face and skull. Geschickter reported a large series of carcinomas of the nasal and paranasal sinuses, but made no attempt to localize the primary site of the tumors to a single sinus. He designated the squamous cell carcinomas as cancers of the maxillo-ethmoid region, and stated that they usually erode the bone and invade the surrounding structures before being detected. New⁶ and Quick⁷ also reported a large number of cancerous growths of the nasal sinuses, but their discussion was mainly clinical and therapeutic. There are also publications of a single patient, or a small group of patients without descriptive pathology. My report has interest because the origin of the tumor was clearly in the ethmoid sinus and because there were extensive regional metastases without invasion of the nasal space or other paranasal sinuses.

REPORT

A white man, age 50 years, entered the service of Dr. J. T. Reynolds at St. Luke's Hospital, Chicago, October 11, 1945. About four years before he had had lachrymation and pain in the right eye, pain in the right ear, and enlargement of the right cervical lymph nodes. A diagnosis of nasopharyngeal cancer was made at this time and a radical dissection of the right side of the neck was done. Shortly thereafter, the lymph nodes on the left side of the neck were involved,

for which he received radiation therapy. He had had deafness in the left ear, hoarseness, and an inability to swallow solid food and a weight loss of 15 pounds during the two months prior to his admission. There were old healed surgical scars on the right side of the neck, a nodular swelling of the left side of the face and neck, and the supraclavicular and cervical lymph nodes were enlarged and hard. The nasal airway was obstructed. The erythrocytes were 3,640,000 and the leucocytes 9,900 per cmm., and the hemoglobin 10.2 grams percent. The blood non-protein nitrogen, sugar and cholesterol were within normal limits. On October 30, 1945, a tracheotomy was done. His temperature rose and he died on November 2, 1945.

The essentials of the postmortem examination (head, neck and trunk) made immediately after death are as follows. The deep scalp tissues over the left occipital and parietal regions were markedly edematous. The cerebellar and cerebral hemispheres were symmetrical and had no tumor tissues. The dura stripped easily from the base of the cranium. The left mastoid air cells had considerable serous exudate; the sphenoid sinus had a large amount of mucopurulent secretion. The cribriform plate of the left ethmoid had multiple perforations 3 to 8 mm. in diameter. The upper part of the nasopharynx below the body of the sphenoid was edematous and the mucosa on the anterior surface of the clivus was blackened. These tissues were not granular. In the left ethmoid region however there were finely nodular grey tissue thickenings that extended into and had roughened the bone and were associated with new growths of bone. The bone tissues in the upper part of the ethmoid were thickened, pitted, and in front near the frontal sinus and extending back to the body of the sphenoid were small pockets filled with a purulent secretion. The opening of the left maxillary sinus had considerable secretion, but when the sinus was explored, it was not distended and contained no exudate. The right maxillary sinus was unchanged.

There was an old healed surgical scar on the right side of the neck, beginning 2 cms. below the lobe of the ear, 1.5 cms. posterior to the mandible and extending downward and slightly forward for 12 cms. Another old healed surgi-

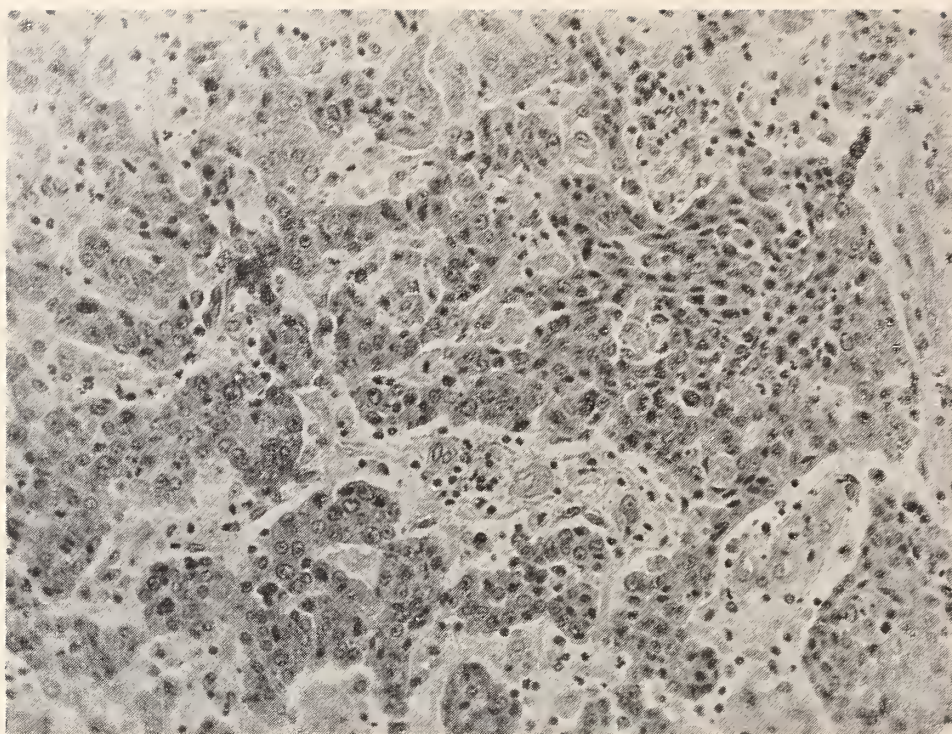


Figure 1. Photomicrograph illustrating the histologic structure of the carcinoma of the ethmoid. X-198

cal scar of the right side of the neck began at the same level as the first and extended downward and forward in a line parallel to the inferior ramus of the mandible for 8.5 cms. A nodular swelling of the left side of the neck extended from the midline in front to the midline behind, a region 21 by 6 cms. The skin here was red, indurated and at one place it was retracted and necrotic. A recent unhealed tracheotomy wound of the neck 4.5 cms. long was above the manubrium of the sternum. The cervical and supraclavicular lymph nodes were enlarged. The lymph nodes in the left axillary fossa were a mass about 2.5 by 2.5 by 1.5 cms., and surfaces made by cutting had firm grey tumor tissue. The right submaxillary gland was not found. In the subcutaneous tissues were fibrous thickenings and a few grey tumor nodules as large as 1 cm. On the left side, the skin and subcutaneous tissues were markedly adherent to matted tumor nodules that extended 16 cms. and were about 4 by 5 cms. in dia. Surfaces made by cutting were firm and grey. The surface of the tongue was smooth and grey. Other viscera and lymph nodes had no tumor metastases grossly but later a small nodule was found by histologic examination in the thyroid.

Sections of the finely nodular grey tissues from the left ethmoid cells stained with hematoxylin and eosin had a narrow surface layer of

pseudostratified epithelium. The underlying fibroplastic stroma was extensively ingrown by large and small masses of epithelial cells arranged in mosaics (Figure 1) which simulated those in the middle layers of a mucosal surface. They were medium to large in size, and had vesicular nuclei and a small amount of cytoplasm. Among the cells were some in mitosis. At some levels there were regions of chronic inflammation with small infiltrations of lymphocytes. The blackened mucosal tissues from the nasopharynx had no tumor cells. Tissues from the neck, base of the tongue, cervical and axillary lymph nodes and thyroid gland were ingrown extensively by masses of carcinoma cells similar to those described above.

COMMENTS

The lymph channels of the ethmoid cells extend toward the nasal cavity and join the lymphatic vessels therein. Most of the lymphatics of the nasal cavity pass posteriorly and medially into the retropharyngeal spaces, and so the lateral retropharyngeal nodes receive the first metastases. The drainage is then to the deep jugular nodes at the bifurcation of the carotid. Geschickter believed that these tumors metastasize early and that the process is not discovered until late.

Although information regarding the early history of the patient is not available, growth and

extension of the tumor seem to have followed the usual pattern except for local extension, where the growth of this tumor was limited. Apparently the tumor was far advanced before the patient presented himself for treatment. Ringertz reported 20.5 percent five-year cures of squamous cell carcinoma of the sinuses with radiation and electro-surgical therapy. Statistics from other clinics are similar.

SUMMARY

The postmortem examination of an man aged 50 years with an apparent recurrence of a nasopharyngeal cancer demonstrated a squamous cell

carcinoma of the left ethmoid with metastases to the thyroid, to the cervical, supraclavicular and left axillary lymph nodes, and to the subcutaneous tissues of the neck and face.

Carcinomas of the ethmoid metastasize early, and usually the site of origin of tumor is difficult to establish because of the local extension.

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OVARIAN MALIGNANCY

Ovarian malignancy is notoriously silent in its incipency, and irregular vaginal bleeding is not a prominent early symptom. In fact according to Montgomery, over a third of the patients have digestive symptoms as the first indication of trouble. On the other hand, every ovarian enlargement does not warrant removal. When discovered in a young woman, the cyst may be a physiologic one of the retention type, and reexaminations are essential to note if any change occurs at varying times during the menstrual cycle. If, however, the cyst should continue to enlarge, and this is especially true of older women, prompt laparotomy is indicated for any new growth of the ovary has malignant potentialities. There is no pelvic condition that requires better judgment in management than that of ovarian enlargements.

Excerpt, Clinical Significance of Abnormal Vaginal Bleeding, Scheffey, Lewis C. and Lang, Warren R., AM. Practitioner, March, 1949.

Eczematous contact dermatitis due to topically applied local anesthetics is now seen with increasing frequency. This may be due to the more wide-spread use of medicaments containing local anesthetics. Many proprietaries contain local anesthetics. Such use has become more frequent through over-the-counter sales, and through recommendations of the physician who prescribes it (in the so-called ethical product) and in his prescriptions.

Excerpts, Contact Dermatitis Due to Topical Anesthetics, Max Braitman, M.D., West New York, N. J., The Journal of the Medical Society of New Jersey, June, 1949.

The efficacy of streptomycin against tuberculous infections has proved that tuberculosis is yet another disease vulnerable to chemotherapeutic attack. Without undue optimism, greater triumphs may be anticipated. Karl H. Pfuetze, M. D., and Marjorie M. Pyle, M. D., JAMA, March 5, 1949.

NEWS OF THE STATE



BUREAU

Dr. John E. Maloney was recently appointed resident pathologist at the Perry Memorial Hospital, Princeton, a newly created position.

COOK

Fifty Year Club Member.—Dr. H. H. Bay, Crystal Lake, was recently made a Fifty Year Club member of the Illinois State Medical Society.

Society News.—Dr. M. A. Perlstein discussed "Education of Cerebral Palsied Children" during a course on special education of the Horace H. Rackham School of Special Education, Michigan State Normal College, Ypsilanti, Michigan, July 1. On July 6, he addressed the Speech Seminar of Northwestern University, Evanston, on "Drug Therapy in Cerebral Palsy."

Dr. Philip Thorek addressed the Oakland County Medical Society in Pontiac, Michigan, recently, on "Diverticula of the Esophagus."

Dr. Max Thorek has been notified by the French Government that he has been made an Officer of the Legion d'Honneur of France, "in appreciation from the French Government for his continuous services in the cause of amity between the United States and France."

Dr. Robert M. Gluckman has been appointed full-time psychiatrist for the Illinois State Training School for boys, St. Charles, effective July 1. Dr. Gluckman is resident psychiatrist at the Illinois Neuropsychiatric Institute, Chicago.

University News.—Frederic T. Jung, assistant secretary, Council on Physical Medicine and Rehabilitation, American Medical Association, gave an assembly hour lecture at the University of Illinois College of Medicine, June 1, on "Medical Fallacy and Quackery." The lecture was under the

sponsorship of Delta Kappa Sigma.—Dr. E. G. L. Bywaters, rheumatologist, The British Postgraduate Hospital, London, England, gave an assembly hour lecture at the University of Illinois College of Medicine, June 22, on "The Crush Syndrome."

Grant For Research.—The Board of Directors of the Hektoen Institute for Medical Research of the Cook County Hospital wishes to announce the receipt of a grant of \$13,800 from the Dr. Leonard H. and Louis Weissman Medical Research Foundation on June 1. This money is to be used for some special virus studies, conducted under the supervision of Dr. Oscar Felsenfeld, Director of Bacteriology and Virology. The Hektoen Institute for Medical Research of the Cook County Hospital has received a second grant of \$2,000 from the Mildred Rothschild Memorial Foundation for continued study of pemphigus disease in the departments of bacteriology and virology, under the direction of Dr. Oscar Felsenfeld.

Orthopedic Prize Goes to Students.—Leonard R. Smith and Richard G. Shifrin, junior medical students at the University of Illinois College of Medicine, have been awarded the 1949 Leo F. Miller Prize for their presentation of an essay in the field of orthopaedic surgery.

Awarding of the prize, which carries a \$40 stipend, was announced by Dr. Fremont A. Chandler, professor and head of the department of orthopaedic surgery. The prize-winning essay was entitled "Current Concepts in Rheumatoid Arthritis".

Dr. Cole Honored.—The distinguished service award of the University of Kansas was presented to Dr. Warren H. Cole of Chicago, at the recent graduation and alumni exercises of the College.

The award is presented annually by the University of Kansas through its Alumni Association to graduates for their distinguished service in various fields. Dr. Cole received the bachelor of science degree from Kansas in 1918.

Dr. Cole is professor of surgery and head of the department at the University of Illinois College of Medicine. He previously was associated with Washington University, St. Louis, Mo.

A year ago, Dr. Cole served as Senior Scientist Attache for the U. S. mission to Britain for Science and Technology, which was conducted under the jurisdiction of the Department of State. He visited numerous hospitals and clinics on the mission which was designed to establish liaison with British surgeons.

He recently has been named to the office of president-elect of the Chicago Medical Society.

Fellowship in Rheumatic Fever Created — First Award.—Dr. Alan Mehler, associated with Northwestern University Medical School, has been assigned the first award in a newly created fellowship for research in rheumatic fever at Northwestern. The Herman H. Gordon Foundation of the La Rabida Jackson Park Sanitarium, organized some four years ago in memory of a young man who died from the disease, a graduate of Northwestern, created the \$2,500 research fellowship.

All-Time Record Established for Women Graduates.—An all-time record number of 24 women received the doctor of medicine degrees from the University of Illinois at commencement exercises, Friday, June 17.

The record number received degrees on the 100th anniversary of the graduation of the first woman from a medical school in this country. Elizabeth Blackwell graduated from a New York medical school in 1849.

The 24 students who graduated at commencement exercises represent the largest number of women graduates in the 68-year history of the University of Illinois College of Medicine.

Registration figures compiled by the American Medical Association show that there are 2,159 women enrolled in medical schools in this nation, representing 9.5 percent of the total student body. That number is twice as many as were enrolled in 1935, and four times more than 1905.

Students Accepted in Medical Fraternity.—Nineteen students in the College of Medicine at the University of Illinois have been elected to membership in Pi Kappa Epsilon, national honorary medical fraternity.

Membership in the fraternity is based upon character, personality, and professional qualities.

Students elected to membership are Frank A. Schiltz and George E. Armbruster, Decatur; Charles M. Berfield, Elmhurst; Burton M. Sutherland, Wheaton; Edwin F. Buzan, Jr., Alton; Henry H. Swain, Urbana; Thomas L. Brannick, Normal; John B. Moore III, Benton; George Elfers, Jr., Richmond; and Karl D. Venters, Herrin.

Also elected to membership were Alvin Harris, Aaron J. Fink, Dean S. Rosset, John R. Erickson, and Harry B. Sone, Chicago; Rudolph P. Froeschle, Hazen, N. D.; Bernard S. Patrick, Corinth, Miss.; Anthony J. Lund, Leeds, N. D.; and Albert S. Hagan, Jr., Murlbridge, S. D.

Instructors Chosen.—Seniors at the University of Illinois College of Medicine have named Dr. Edmund F. Foley and Dr. Kurt Glaser as the best instructors during the 1948-1949 school year. Dr. Glaser and Dr. Foley have received the Raymond B. Allen Instructorship Awards, which were established in 1948 by the Medical Student Council in honor of the former executive dean of the University's Chicago Professional Colleges. The awards are designed to honor excellency in individual instructorship rendered by faculty members to the Students. The award for excellency in didactic instruction was given to Dr. Foley, who is a professor of medicine. Dr. Glaser, an instructor in pediatrics, was honored for clinical teaching. Both Dr. Foley and Dr. Glaser have been presented with gold keys in the shape of an apple.

Honorary Degrees.—Dr. Ross G. Harrison, internationally-famous biologist who "invented" the now universally used methods of tissue culture, and Harold H. Swift, former chairman of the board of trustees of the University of Chicago, were granted honorary degrees in the 237 convocation of the Midway university recently. Dr. Harrison and Swift were the one-hundred and twenty-fifth and twenty-sixth recipients to receive honorary degrees at the University of Chicago since the first LL.D. was presented President William McKinley in 1898. Dr. Harrison, who was awarded the doctor of science degree, was cited for "his ingenious experimental methods and brilliant analyses which have signally advanced knowledge of the nervous system." Swift, who served as chairman of the university's board of trustees for twenty-six years and as a member for thirty-five years, was awarded the doctor of laws degree by his alma mater. Chairman of the board of Swift and Company, Swift was cited as "a leading Chicago citizen whose labors of the last four decades manifest fidelity to the highest interests of the city, the university and the nation."

Dr. Day Retires.—Dr. Alexander A. Day, professor of bacteriology and chairman of the department in the Northwestern University Medical School, retired on August 31. A member of the School's faculty for thirty-seven years, he was given a citation by the University Senate at the 91st annual commencement, June 13. Expansion and development of one of the Medical School's key departments, that of audio-visual medical education, were effected during Dr. Day's chairmanship. The department was one of the earliest in its field, having been established at Northwestern in 1926. Services of the department are available to every class and division of the School, to assist in the training of physicians and surgeons.

Throughout his almost 40 years at Northwestern, Dr. Day has been known as one of the school's most popular and stimulating teachers, and as a wise counselor of student doctors who have enjoyed his guidance during the years of their education.

Rush Reunion.—Ten of the twenty-five surviving members of the Rush Medical College class of 1894 held a reunion at the Morrison Hotel recently, the eleventh regular reunion since their graduation. The class originally had 163 members. Dr. Edward H. Ochsner, 81, has been class president throughout the fifty-five years. The seventeen surviving members who did not attend the meeting were prevented by age or distance from Chicago.

Special Society Elections.—At the May 5 meeting of the Illinois Psychiatric Society, the following officers were chosen: Dr. V. G. Urse, Chicago, president; Dr. D. Louis Steinberg, Elgin, vice president; Dr. Louis D. Boshes, Chicago, secretary-treasurer; Dr. Benjamin Boshes and Dr. Maxwell Gitelson, both of Chicago, councilors. —The Chicago Urological Society chose the following officers at its meeting April 28: Dr. James I. Farrell, president; Dr. Herman M. Soloway, vice president and Dr. J. S. Grove, secretary-treasurer. —Dr. George K. Fenn was reelected president of the Chicago Heart Association as were Dr. Stanley Gibson, chairman of the board of the executive committee, and S. Dewitt Clough, chairman of the board of governors.

DU PAGE

Fifty Year Club Member.—Dr. Henry F. Langhorst, Elmhurst, was presented with the Fifty Year Club insignia of the Illinois State Medical Society, at a recent meeting of the DuPage County Medical Society. The presentation was made by Dr. Harry M. Hedge, Evanston, President Elect of the Illinois State Medical Society. Dr. Ernest S. Watson, Elmhurst, addressed the meeting on "Newer Trends in Pediatrics."

JACKSON

Dr. John Bucar, Ripon, Wisconsin, has become associate professor of physiology and associate university physician in the health service at Southern Illinois University.

LA SALLE

Retires from Practice.—Dr. W. P. Fread has retired from active practice in Ottawa, ending forty years in service. The physician graduated from Hering Medical College in 1903. In 1907 he completed an internship at the Chicago Homeopathic Hospital and practiced for a time in Ohio before settling in Ottawa.

MACOUPIN

Dr. Garold V. Stryker, associate professor of dermatology, St. Louis University Medical School, St. Louis, gave an illustrated lecture before the Macoupin and Montgomery County Medical Societies, May 24, in Carlinville. His subject was "The Management of the Neuro-Dermatoses."

MADISON

Dr. Gilbert Forbes, St. Louis, discussed "Convulsive Disorders of Childhood" before the Madison County Medical Society in Edwardsville, June 2.

Dr. Danely Slaughter, associate professor of surgery, University of Illinois College of Medicine, addressed the Alton Medical Society recently on "Recent Advances in Cancer."

McHENRY

The McHenry County Medical Society was addressed recently by Dr. Charles K. Petter, director of Lake County Tuberculosis Sanitarium. Dr. Petter discussed "Pulmonary Tuberculosis."

PEORIA

Dr. Frederic E. D. Foley, St. Paul, discussed "Choice of Operation for Vesical Neck Obstruction" before the Peoria Medical Society, June 21.

PULASKI

Resolution Honors Deceased Member —At a recent meeting the following resolution was adopted!

We the undersigned, members of the Pulaski County Medical Society

In memory of our esteemed Professional Brother;

Whereas; God in His infinite wisdom has removed from our midst one of our members; Dr. Otis T. Hudson, Mounds, Illinois.

Whereas; Dr. Hudson was a member of Pulaski County Medical Society since 1912, filling the different offices, serving as secretary 1936 to 1949, and a strong advocate for medical organization.

Whereas; He was held in highest esteem as a general practitioner in this County, was a Member Volunteer Medical Corps World War I, served as Medical Examiner for Pulaski County Local Board No. 1, Selective Service System, duration World War II, was serving as Medical Advisor for Pulaski County Local Board No. 184, Selective Service System, all without remuneration.

Whereas; He was serving as Chief of Staff, St. Mary's Hospital, Cairo, Illinois, and had taught obstetrics to the nurses at St. Mary's Hospital for fourteen years.

Whereas; He served as Local Surgeon for the Illinois Central Railroad Company from 1911 to 1921 and District Surgeon 1921 to 1949.

Whereas; He served as Coroner of Pulaski County from 1920 to 1944.

Whereas; We, the members of Pulaski County Medical Society greatly appreciate the distinction and heights in the profession attained by our colleague, although we feel our great loss, we shall cherish in memory the friendship and association of him whom we so loved.

Therefore; Be It Resolved; That in expression of our most heartfelt sympathy to send a copy of the resolutions to Mrs. Hudson, that a copy of the resolutions be spread in the records

of this Society and a copy sent to the State Medical Journal.

Very sincerely yours,
H. J. Elkins
A. G. Robinson
W. R. Wesenberg

ROCK ISLAND

District Meeting.—A quarterly meeting of the Iowa Illinois Central District Medical Association was held in Rock Island, May 25. Among the speakers were Dr. Carl A. Hamann, Cleveland, Ohio; Dr. John Van Prohaska, Chicago; and Dr. W. Barry Wood, Jr., St. Louis, Missouri. The discussants were Dr. A. C. Sorenson, Davenport, Iowa; Dr. D. B. Freeman, Moline; and Dr. Harry B. Weinberg, Davenport.

SHELBY

Ninety-Four years of Age.—Dr. J. C. Westervelt, one of Shelbyville's oldest citizens, observed his ninety-fourth birthday, June 7. He has retired from the active practice of medicine.

WARREN

Public Meeting for Dr. Hoyt.—More than one hundred townspeople gathered at a public dinner to honor Dr. L. T. Hoyt, Roseville, the 1948 Outstanding General Practitioner of the Illinois State Medical Society. A two pen desk set was presented to the physician.

GENERAL

Relief of Hypertension.—The June issue of "Radiology," journal of the American College of Radiology, carries an article on the utilization of small doses of x-ray to pituitary and adrenals for the relief of hypertension by James H. Hutton, James T. Case, Earnest C. Olson, Warren W. Furey, Stanley Fahlstrom and William L. Culpepper of Chicago and Earl E. Madden of Redondo Beach, Calif., a former Chicagoan. The article, giving results in 651 patients, is a report on work first recorded in the Illinois Medical Journal in December, 1933. It was also made the basis of the general monthly newspaper release for June by the American College of Radiology.

Association of Medical Health Officers Revived.—The full-time medical health officers in Illinois, at the April meeting of the Illinois Public Health Association, reactivated the Illinois Association of Medical Health Officers which had been discontinued some years ago after it merged with the Illinois Public Health Association. The Association makes eligible for membership all full-time medical health officers, school health physicians, professors of public health and preventive medicine, and other medical men with public health occupation. All members must be engaged in full-time public health work. The following officers were elected: W. H. Tucker, Evanston, president; S. N. Mallison, Champaign, vice president; Norman J. Rose, Highland, secretary-treasurer. Arlington Ailes, La Salle; A. C. Baxter, Springfield and P. A. Steele, Decatur,

were elected to the Executive Committee. The Association will give its support to the strengthening and furthering of the public health movement in Illinois.

News of Illinois Chest Physicians.—Dr. Minas Joannides, Chicago, was re-elected Treasurer of the American College of Chest Physicians at the Fifteenth Annual Meeting held in Atlantic City, New Jersey, June 2 - 5, 1949. Dr. Italo Volini of Chicago was appointed Governor of the College for the State of Illinois to serve the unexpired term of Dr. Robert K. Campbell, Springfield, who has retired because of illness. Dr. Henry Sweany, Chicago, was elected a member of the Editorial Board of the College journal, "Diseases of the Chest," and Dr. Edwin R. Levine, also of Chicago, was elected Secretary of the Conference of College Chapter Officials.

The following physicians in the State of Illinois received their Fellowship Certificates at the Convocation held at the Ambassador Hotel, Atlantic City on June 4: Dr. Peter B. Bianco, Peoria; Dr. Loren L. Collins, Edwardsville; Dr. Hugo O. Deuss, Chicago; Dr. Morris Greenberg, Jacksonville; Dr. Clarence H. Payne, Chicago; Dr. Isaddre Zapolsky, Elgin.

Dr. Darrell H. Trumpe, Springfield, was elected president of the Illinois Chapter of the American College of Chest Physicians at its recent meeting in the Palmer House, Chicago; Dr. Edwin R. Levine, Chicago, vice president, and Dr. Charles K. Petter, Waukegan, secretary-treasurer.

Special Counselor-Training Program for Handicapped Persons.—Fourteen fellowship winners have been selected in a special counselor-training program designed to meet the employment problems of handicapped persons, according to an announcement by the co-sponsors of the program, Alpha Gamma Delta, international.

The 14 fellowship winners are being trained as employment counselors for persons disabled by cerebral palsy and other multiple handicaps. The six-week course began May 16 at the Institute of Rehabilitation and Physical Medicine of New York University, Bellevue Medical Center, in conjunction with New York University School of Education.

One of the chief objectives of the new program will be to interest employers in utilizing the services of qualified persons who would be valuable employees although handicapped by cerebral palsy or other disabilities.

Applicants were selected on the basis of professional qualifications and the contribution they can make toward good counseling and placement work. A special screening committee, made up of representatives from Alpha Gamma Delta and the National Society, reviewed all applicants.

Fellowship winners include: Edward J. Aud, Enid, Okla.; Otilie M. Banks, Newark, N. J.;

Raymond W. Dutcher, San Bernadino, Calif.; August W. Gehrke, Duluth, Minn.; Florence I. Haasarud, Minneapolis, Minn.; Golda P. Harper, Des Moines, Ia.; Frances D. Iandon, Tulsa, Okla.; Betty Matenky, Flint, Mich.; Uel P. McCullough, Goodyear, Ariz.; Martha L. Murphy, Toronto, Ontario, Canada; Maurice J. Reisman, Philadelphia, Pa.; and Robert M. Speed, Sr., West Point, Miss.

The course is under the direction of Dr. James Garrett, who is Director of the Psycho-Social and Vocational Service at the Institute of Rehabilitation and Physical Medicine. He will be assisted by well known authorities in the fields of physical medicine, psychiatry, counseling and employment. Fellowship grants, which are provided by the fraternity, amount to \$350 each, including tuition and maintenance.

Psycho-social and medical aspects will be included in the course along with the case study evaluations, clinical study and observation. Lectures will be given in job analysis, occupational information, psychology of the handicapped and agency inter-relationships.

HEALTH DEPARTMENT ACTIVITIES

Lowest Death Rate in City's History.—Final Health Department statistics for 1948 show the lowest death rate in Chicago's history was posted last year, 10.3 per 1,000 population. A century ago, in 1849, during a cholera epidemic, Chicago's death rate was 73.8 per 1,000 population, more than seven times the 1948 figure.

In 1948, for the first time in the city's history, maternal deaths were held to less than 1 per 1,000 live births. The 1948 record was 0.7 per 1,000, compared to 1.0 per 1,000 in 1947. Since 1916, maternal deaths in Chicago have been cut from almost 7 per 1,000 live births, to 0.7 per 1,000.

Infant deaths in 1948 were held to a rate of 28.5 per 1,000 live births, compared to 28.2 per 1,000 in 1947, and to about 124 per 1,000 a generation ago in 1916—a reduction of 77%. So far in 1949, the infant death rate is 28.5, below the 1948 figure of 29.5 for the same period.

The low number of maternal and infant deaths recorded in 1948 reflects intensive work throughout the year to save the lives of both mothers and babies. The medical profession and the Health Department cooperated closely in carrying out Chicago's hospital regulations to assure expert medical and hospital care for every mother just before, during and after delivery, and for every newborn infant. The Joint Maternal Welfare Committee of Cook County, representing the medical profession, the Health Department, hospitals, and other interested groups carefully investigated each of the 56 maternal deaths which occurred in Chicago during the year in order to reduce still further the causes of maternal mortality. Other important factors were public health nursing services, the Department's premature ambulance program, the

provision of mothers' breast milk for premature, immature and sick babies, and maternal and infant welfare services provided through the Department's 40 stations in the city and the stations of the Infant Welfare Society of Chicago.

Communicable Disease Deaths Down.—Deaths from communicable diseases also were held to new record lows, according to final figures for the year. During the entire 12 months of 1948 there were no deaths from scarlet fever, only 1 death from diphtheria and 4 from whooping cough. The 1947 record was: Scarlet fever, 0 deaths; diphtheria, 3, and whooping cough, 6. The tuberculosis death rate was down to 36.5 per 100,000 population from 38.2 in 1947. Only 10 years ago, in 1940, the rate was 54.7 almost one and one-half times the 1948 rate.

The remarkable record of 1 death from diphtheria in Chicago for a whole year, a rate of .03 per 100,000 population, was largely due to the unrelenting efforts of the Health Department and the medical profession to have all babies inoculated with diphtheria toxoid by the time they were a year old, and all preschool and school children protected by booster injections of the toxoid. The previous low record was 3 deaths reported in 1947, for a rate of 0.1 per 100,000 population. Only a few years ago, in 1943, the rate was 1.5, and there were 53 deaths from diphtheria in Chicago. Back in 1880, diphtheria caused 290.7 deaths per 100,000 population.

The city's lowest death rate for whooping cough was also posted in 1948—approximately 0.1 per 100,000 population, compared with the previous low of 0.2 in 1947. All babies at Department infant welfare stations were inoculated against whooping cough and the Department recommended that all other infants be given this protection by their private physicians. Wherever possible, the Department hospitalized infants under one year of age who had whooping cough.

DEATHS

RALPH TRUMAN CLARK, Springfield, who graduated at Northwestern University Medical School in 1928, died June 5, aged 52 following an illness of several months.

ERIC JACOB DANER, Chicago, who graduated at Dearborn Medical College, Chicago in 1906, died April 16, aged 68, of diabetes mellitus and chronic interstitial nephritis.

JOSEPH MURRAY DOYLE, Chicago, who graduated at Victoria University Medical Department, Coburg, Ontario, Canada, 1893, died April 28, aged 83, of cerebral hemorrhage and carcinoma.

MIRZA PHILLIP DUComb, Patoka, who graduated at Barnes Medical College, St. Louis, Mo., in 1905, died June 12, aged 75, following a heart attack.

JOHN JAMES A. GRIMES, Chicago, who graduated at Loyola University School of Medicine in 1922, died July 7 in Sacred Heart Sanitarium, Milwaukee, aged 67. He had been on the staff of the Municipal Tuberculosis Sanitarium since 1924.

LEO GEORGE HOGAN, Chicago, who graduated at Bennett College of Eclectic Medicine and Surgery in 1914, died June 18, aged 58, in St. Bernard's Hospital, where he was a staff member.

CECIL MCKEE JACK, Decatur, who graduated at University of Michigan Medical School, Ann Arbor, in 1902, died suddenly in his home, June 28, aged 72. He had served on the board of the Macon County Tuberculosis Sanatorium for 22 years, retiring in 1947.

GEORGE ABRAHAM JETT, Chicago, who graduated at Rush Medical College in 1893, died April 9, aged 77, of carcinoma of the colon.

JOSEPH HENRY SHAVER JOHNSON, Chicago, who graduated at the College of Physicians and Surgeons, Homeopathic, Buffalo, in 1883, and the Hahnemann Medical College and Hospital in 1884, died April 5, aged 92, of cerebral hemorrhage.

LEONARD E. MARKIN, Glencoe, who graduated at Loyola University School of Medicine in 1922, died June 26, aged 51, following a heart attack.

MOSS MAXEY, Mount Vernon, who graduated at Missouri Medical College, St. Louis, in 1897, died June 13, aged 75. He had practiced continuously in Jefferson County for over fifty years.

WILLIAM ALEX O'BRIEN, Chicago, who graduated at the Medical College of Virginia, Richmond, in 1918, died April 7, aged 57, of lobar pneumonia and arteriosclerotic heart disease.

ARTHUR HERMAN PANNENBORG, Chicago Heights, who graduated at University of Louisville School of Medicine, Louisville, Ky., in 1904, died June 30, aged 69. He was a former city commissioner, and health officer.

KATE E. PECKARDT, Chicago, who graduated at Chicago Medical College in 1885, and the Hahnemann Medical College and Hospital in 1889, died March 23, aged 88, of chronic myocarditis and arteriosclerosis.

JACK I. RABENS, Chicago, who graduated at Rush Medical College in 1929, died while attending a dinner for Mount Sinai Hospital alumni, June 19, aged 46.

EDWARD HARRY ROSENZWEIG, Chicago, who graduated at Loyola University School of Medicine in 1922, died March 17, aged 52.

KARL FERDINAND MARIUS SANDBERG, Chicago, retired, who graduated at Kongelige Frederiks Universitet Medisinske Fakultet, Oslo, Norway, in 1881, died June 4 in his home, aged 93. For some years he served as chief surgeon and chairman of the board of the Norwegian-American Hospital.

SILAS SINCLAIR SNIDER, Chicago, who graduated at Rush Medical College in 1934, died in an airplane crash June 15, aged 41. He was on his way east to attend a class reunion at Hanover, N. H.

MARRIAGES

DR. JOHN CLOYD SOUDERS JR., Rock Island, to Dr. Louise Aleen Padburg, Oklahoma City, recently.

DR. JOHN LAURENCE FELDMAN, Quincy, to Miss Mary Alice Harrington at Palmyra, Mo., recently.

"For The Common Good"

Telecasts on Health over WGN-TV.—Since the last issue of the Illinois Medical Journal, the following telecasts have been presented over WGN-TV under the auspices of the Educational Committee of the Illinois State Medical Society: Samuel M. Feinberg, June 21, Hay Fever; Philip Thorek, June 28, Goiter; George E. Shambaugh, Jr., July 8, Your Child's Hearing; L. Martin Hardy, July 14, Understanding the New Baby; Louis Scheman, July 20, Footsteps to Health. The audiometer, demonstrated on the telecast, July 8, was made available through the Audio-Development Company.

Students in health education, working under the jurisdiction of the Cook County Department of

Health, visited the Chicago office July 6, to learn the activities of the Educational Committee. Because of the new development in television arrangements were made for the students to visit WGN-TV during the production of the program "Child's Hearing." Three of the students were from the University of Michigan School of Public Health, one from Columbia and one, a native of Venezuela, from the University of Minnesota. According to WGN-TV, television is a new and challenging medium in health education. The WGN-TV series is a pioneer in the field and medical authorities as well as the TV industry have been generous in their praise of the effort.

Lectures Arranged Through the Educational Committee: Adrian D. M. Kraus, Chicago, Calumet City Health Center, September 15, on Behavior Problems of the Young Child.

Rex D. Hammong, Bryn Mawr Community Church, October 10, on Emotions of the Adult.

Bertha Shafer, Chicago Barry School PTA, October 11, on Sex Education.

Robert R. Mustell, Chicago, Summer School PTA, Chicago, October 19, on Cancer.

Lectures Arranged Through the Scientific Service Committee: Donald H. Wrook, Rockford, Henry County Medical Society in Kewanee, July 14, on Common Painful Syndromes of the Extremities.

Frederick A. Jostes, St. Louis, Macoupin-Montgomery County Medical Societies, in Carlinville, July 26, on Low Back Pain, illustrated.

Joseph H. Kiefer, Chicago, St. Clair County Medical Society, in East St. Louis, September 1, on Carcinoma of the Prostate.

Stanley Fahlstrom, Chicago, Fulton County Medical Society in Canton, September 8, on "Diagnosis and General Considerations in Arthritis."

James H. Mitchell, Chicago, Henry County Medical Society in Kewanee, September 8, on Fungus Infections.

Danely P. Slaughter, Chicago, McDonough County Medical Society in Bushnell, September 23, on Newer Methods in the Diagnosis and Treatment of Cancer, illustrated.

Paul W. Greeley, Chicago, DeKalb County Medical Society in DeKalb, September 27, on Plastic Surgical Repair of Scar Contractures.

AMBITION (ENVY, COMPETITION)

The ambitious person does not necessarily have pathologic emotions, but he certainly runs the risk of being infected with envy or excessive competitiveness. These emotions tend to produce tension and the professional, financial, and social success of many people has been paid for at a high price, i. e., the price of tension, which is prone to express itself through the nervous system upon many parts of the body. The aggressive component inherent in these emotions plays a large role in conditions such as cardiovascular disease, migraine, hypertension, and to some degree, in many others. A successful person can have achieved his goal by a great ability and a friendly, easy-going manner, but he is in the minority. Ambition with its attitude of competition, and sometimes accompanied by envy, is all too often carried along as necessary equipment on the road to success. So it should be looked for and brought into consciousness if present.

Excerpt, The Nature of the Emotional States that Disturb Bodily Function, O. Spurgeon English, M. D., Philadelphia, Pa.; The Pennsylvania Medical Journal, April, 1949.

IMPORTANT URINARY FINDINGS

Hematuria, pyuria, and the passage of calculi, even small ones, may indicate serious urinary tract disease and should never be ignored. However, even in the absence of symptoms that are definitely suggestive of urinary tract disease, we must always consider the possibility of such an abnormality. Roentgen examination by plain film (flat plate) is entirely inadequate; excretory or retrograde urography is necessary. Many cases require both methods of visualization. The patient with urinary tract abnormality should be promptly referred to a competent urologist to prevent irreparable damage. Do not temporize.

Excerpt, The Significance of Symptoms and Roentgen Studies in Urinary Tract Disease, D. Alan Sampson, M. D., Philadelphia, Pa.; The Pennsylvania Medical Journal, April, 1949.

The body cannot undo the damage wrought by tuberculosis infection in a few days or even in a few weeks. Many months are required even to "arrest" the disease. H. Corwin Hinshaw, M. D., Nat. Tuberc. A. Tr., 1948.

The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

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Vol. 96, No. 3



September, 1949

MORTALITY RATES IN ILLINOIS AT AN ALL-TIME LOW

The Health Statistics Bulletin from the Division of Vital Statistics and Records, Illinois Department of Public Health, has been received recently, and it contains a wealth of information for physicians and statisticians in general. This bulletin, under date of July 30, 1949, states that mortality in 1948 in Illinois was at an all time low.

In 1948 only 10.4 deaths were recorded per 1,000 inhabitants, the lowest rate on record. As the mortality rate improves each year, we have an increasing number of the population in the older age groups. The birth rate in 1948 was 20.9 which shows a tapering off from the all time high during the last year of the war and the year following. The rising birth rates of recent years, and lowered death rates, naturally mean a steady increase in the population of the state.

Maternal mortality likewise was at an all time low in 1948, there being only 148 maternal deaths reported during the year, thus establishing the low of 0.8 deaths per 1,000 live births. This is an improvement of more than 25% since 1940. The infant death rate for 1948 per 1,000 live births was 27.6, which is 22% lower than in 1940.

The greatest single factor in the lowered mortality among infants between the age of one month and one year, was the reduction of mor-

tality from influenza and pneumonia, as there were only two deaths from these diseases per 1,000 live births — a reduction of 50% over the 1940 statistics. There has not been a death from smallpox in Illinois for ten years, and for the first time, there was not a single case of small pox reported in the state during the year.

A study of the mortality from the ten leading causes of death is most interesting. Heart disease once more leads the list as the principal cause of death, although there was a decrease in the total number of deaths over the previous year. Cancer is second on the list, then in turn we find cerebral hemorrhage, accidents, nephritis, diabetes, influenza and pneumonia, tuberculosis, premature birth and arteriosclerosis. Of the ten principal causes of death, there was an increase only in cancer and diabetes over the mortality statistics of the previous year.

Accidents were found in fourth place on the list of leading causes of mortality. There were 5,750 deaths from accidents recorded in Illinois during 1948 — 1,926 from motor vehicles; 1,871 from home accidents; 548 occupational, and the rest from miscellaneous causes. Of the home accidents, over 61% of them were among the inhabitants above the age of 65. Six percent of the deaths from accidents in the home were among children under the age of 5 years, and 39% of these were infants under the age of one year. Approximately one half of the infant accidental deaths were from suffocation.

Even though the percentage of residents over 65 is constantly increasing, the actual death rate is less than 1%. This is evidence that great achievements have been accomplished in preventing deaths among premature infants and equal progress has been made in the field of geriatrics. Deaths from influenza, pneumonia and tuberculosis are being reduced each year, and they constitute the major portion of the deaths resulting from communicable disease. It is shown in the annual report from the State Department of Public Health that the proportion of elderly people has been increasing each year steadily since 1930, and this growth is faster than for the country as a whole. In 1940 Illinois had 7.2% of its population over 65, and it is reported that in 1950 these elderly people will constitute at least 8% of the population.

Greater attention is being given each year to the growing interest in geriatrics. This, along with newer types of therapy made available in recent years, accounts to a considerable extent for the better health enjoyed by those in older age groups.

Every member of the medical profession in Illinois should procure a copy of this interesting Health Statistics Bulletin and read it carefully to get factual data on health conditions in this state. Likewise they should familiarize themselves with the mortality statistics and note the improvements which are quite obvious. This material is of incalculable value in presenting actual facts concerning health and medical care in Illinois.

This report does not lend encouragement at all to the information released by Mr. Oscar Ewing in his report of the National Health Conference to the President in which he deplored the health records of the country in no uncertain terms. It is quite obvious that Illinois is thoroughly capable of caring for its own health needs and does not require outside assistance. Many accidents, of course, are preventable, yet it does not seem possible that federal control of medical care as intimated in Mr. Ewing's report, would in any way reduce the number of accidental deaths.

Greater care on the part of the citizenry would be the greatest factor in the reduction of accidents. The large number of home accidents could be reduced through the application of knowledge already available to most people.

THE HEGELIAN PHILOSOPHY

There is food for thought in Leo Alexander's article "Medical Science Under Dictatorship" in the July 14 issue of *The New England Journal of Medicine*. It is inconceivable that well meaning medical men were lured into playing an active role in the notorious Nazi atrocities. The catastrophe will go down in history as one of the best examples of how a group of well educated men gave an inch to ruthless politicians and were taken for a mile.

Since anything is possible under dictatorship the time to act is when the seeds of revolution are being sown; when all semblance of freedom is lost it is obviously too late. The Nazi resorted to clever propaganda from the start and, according to Alexander, "The beginnings at first were merely a subtle shift in emphasis in the basic attitude of the physicians. It started with the acceptance of the attitude, basic in the euthanasia movement, that there is such a thing as life not worthy to be lived. This attitude in its early stages concerned itself merely with the severely and chronically sick. Gradually the sphere of those to be included in this category was enlarged to encompass the socially unproductive, the ideologically unwanted, the racially unwanted and finally all non-Germans. But it is important to realize that the infinitely small wedged-in lever from which this entire trend of mind received its impetus was the attitude toward the nonrehabilitable sick.

"It is, therefore, this subtle shift in emphasis of the physicians' attitude that one must thoroughly investigate. It is a recent significant trend in medicine, including psychiatry, to regard prevention as more important than cure." In other words they stressed the Hegelian philosophy which is the guiding principle of many of our recent dictators. It is imbued with the theory that only that which is useful is worth keeping. As a result, the mass extermination of the chronically sick, in the interest of saving useless expense to the community, appears to be warranted. All that was needed by the Nazi was a letter from the physician and the exterminators took over from this point on. From here it was easy to include those who were socially unfit and before long any man or woman who was an enemy of the party.

In a Government in which the physicians are a part of the state it is not difficult to conceive

how a letter of this nature could be obtained to eliminate any one whom the boss disliked. In this respect the politician acquired the power of life and death over any one. The physician, as his servant, became a partner in crime. Thus the Nazi were capable of making "medical science into an instrument of political power—a formidable, essential tool in the complete and effective manipulation of totalitarian control. This should be a warning to all civilized nations, and particularly to individuals who are blinded by the efficiency of a totalitarian rule, under whatever name."

According to Alexander, traces of euthanasia can be seen in this country. Through research the physician is dangerously close to being a mere technician of rehabilitation. He is no longer the Good Samaritan whose main function is to give hope to the patient and to relieve his relatives of the responsibility. If we neglect our chronically ill and make no effort to restore them to useful citizens we run the risk of encouraging the Hegelian premise of "what is useful is right." In this respect many of the national societies and foundations for cancer, tuberculosis, infantile paralysis, epilepsy, heart disease, and multiple sclerosis are coming to the rescue. They are fostered by people who believe that something can be done for these unfortunate individuals. They combat the executioner by stealing his logic and weakening his propaganda. The Dutch physicians refused to cooperate during the war with this German principle by unanimously acting from the beginning to resist the first step. This was done in spite of threats, imprisonment and sending scores to concentration camps. It worked and as a result thousands still are alive.

POLIOMYELITIS IN 1949 IN ILLINOIS

Illinois is currently struggling to overcome what may be its worst outbreak of poliomyelitis. From nearly every section of the state new cases are being reported daily, and at this time, the total number of cases is in excess of 1,400. In some areas the infection seems more virulent than in others and it is noteworthy that more cases have appeared proportionately, in four counties many miles apart.

A few years ago, such an outbreak would have had more sinister implications than it has in 1949. During the past decade, due to re-

search carried out with funds subscribed individually or through the National Foundation for Infantile Paralysis, much has been learned about the disease and about other virus diseases as well. The result is that today, as seriously as the polio outbreak must be considered, it is possible to say that the final results will be far less tragic than a comparable outbreak would have produced 15 or 20 years ago.

Many new facts have been established regarding poliomyelitis by that research. The following paragraphs, prepared by an outstanding student of the disease, sum up some of the newer ideas concerning poliomyelitis.

"Clinical and experimental evidence has shown the transmission of polio virus via the gastrointestinal tract as well as via the upper respiratory tract. Recent investigations have revealed the virus in the nasal secretion during the early stage of polio, even before any symptoms of illness are manifest. The implications of those facts are obvious.

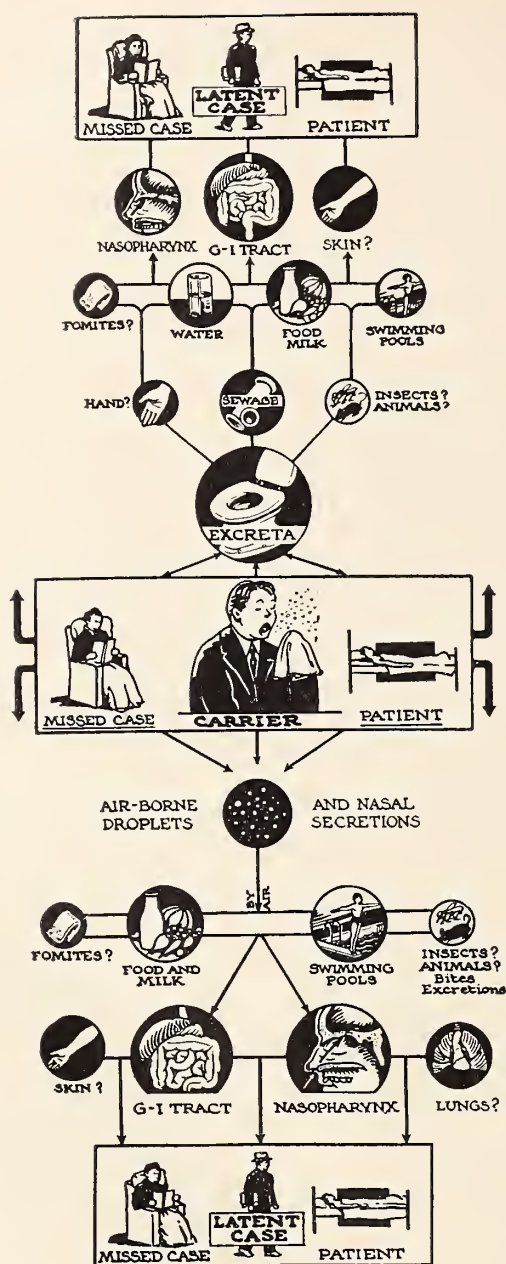
"Over a span of years it is evident that polio is increasing over and above the increase that could reasonably be expected from improved diagnostic ability and facilities.

"There is no doubt that more and more polio areas are developing in regions that were formerly comparatively free. Two notable examples of this are Texas and North Carolina.

"There is no doubt that polio is attacking more and more adults in proportion to the total number of cases. It appears that the disease is usually more severe in adults than in children, which seems to coincide with the fact that when an adult is attacked by a childhood disease it is usually more severe than the same disease in children.

"There is some legitimate criticism of the widespread newspaper publicity. There is no doubt that the population is getting increasingly jittery about polio. It has been said that polio hysteria is worse than polio itself. I believe that a tiny bit of polio panic is a good thing; but mass polio hysteria is to be deplored. There is justifiable criticism of the widespread publicity in the press.

"A word about bulbar polio hysteria is essential. When a child is seriously ill with polio, the parents frantically say "Call a doctor — call two doctors — call an ambulance — get a respirator . . ." little knowing that one of the surest ways



(Lewin, Hygeia, Oct., 1940.)

Infantile Paralysis, Lewin—W. B. Saunders, 1941 (Revised)

HYPOTHETICAL MEANS OF DISSEMINATION OF THE VIRUS OF ANTERIOR POLIOMYELITIS

Beginning with the central figures, the carrier is probably one of the most important sources of the spread of the disease, but the "missed" case and the actual patient are other important sources.

The chief means of dissemination are by way of excreta, and perhaps direct contact, and through insects and animals, and by means of air-borne droplets.

The most important portal of entry is the gastrointestinal tract with the nasopharynx and skin as other possibilities. By these routes, the virus reaches either the latent case, the missed case or the patient.

Next in importance to the carrier as a source of infection is the latent case, an elusive source.

Secondary means of spread include: foods, milk, water, swimming pools, fomites and possibly the bites or excretions of insects and animals.

(Relative importance of various factors is indicated to a degree by the size of the figure and the lettering.)

to kill some bulbar polios is to put them in respirators without benefit of suction of the mucous from the throat and trachea and without raising the foot of the respirator to obtain gravity drainage.

"Throughout the world, and especially in the U. S., some of the keenest minds in all branches of the medical sciences are working feverishly to find, first, more about the cause and transmission of the disease, second, a prophylactic agent such as a vaccine, and third, a curative agent, either from the realm of chemotherapy, antibiotic therapy, immunotherapy, or a biological product such as hyperimmune serum. Definite strides have been made in all aspects of this important subject from the standpoint of etiology, epidemiology, prevalence, geographic distribution and associated factors. For example, Enders has shown that the virus of polio can be grown on tissue cultures. His work has been confirmed by other investigators which is a very important advance step in the solution of the over-all problem.

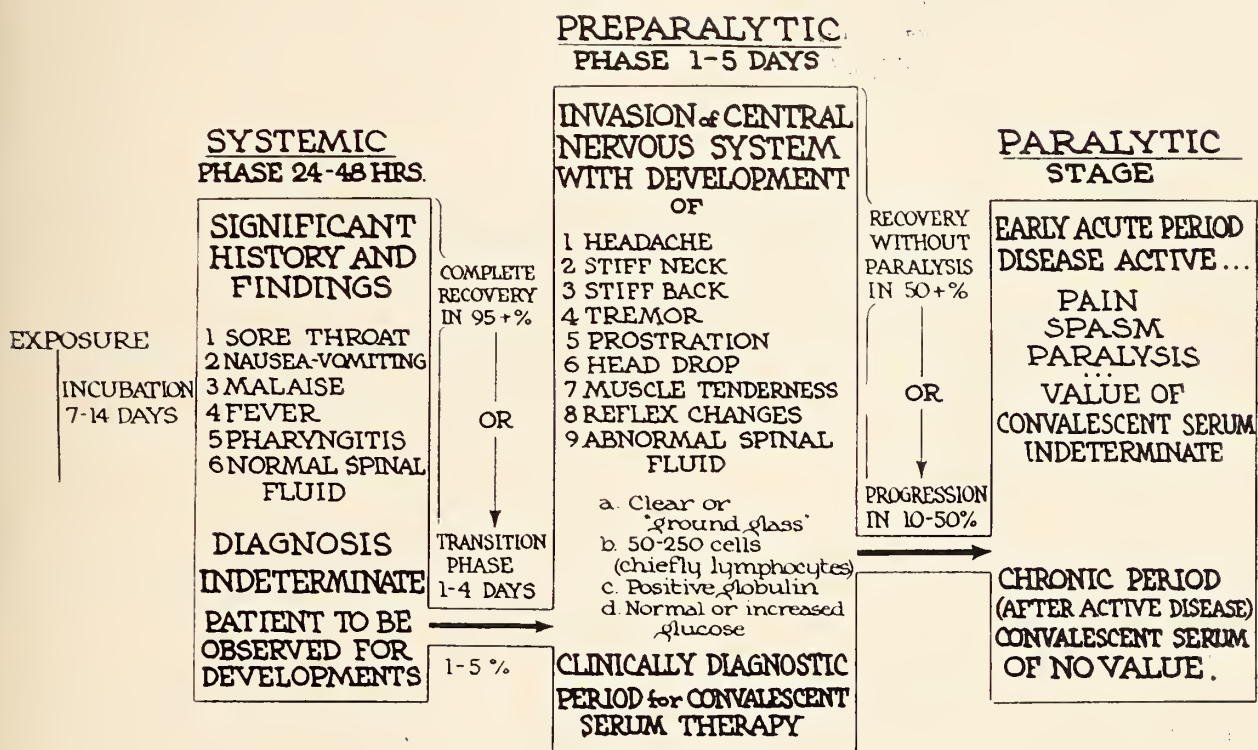
"Recent investigations reveal definite correlation between the solid immunity in animals and a high antibody titer in the blood. This experimental work supports the practice of using human convalescent serum of high antibody titer in early cases of acute preparalytic polio. Such human convalescent serum is distributed throughout the state by the Illinois Department of Public Health.

"A note of hope is discerned in the fact that such chemical substances as aureomycin and chloramphenicol have been effective against some viruses. It is not inconceivable that like substances may be effective in polio. Another antibiotic may be found which will be effective against the polio virus.

"Up to a few years ago it was thought that the pathology of this disease was a closed chapter, however, some very important recent additions to our knowledge have been contributed, especially regarding the respiratory center and the circulatory center in the brain.

"A significant milestone on the road to solution of the problem was the first International Polio Conference held in New York City in July, 1948, under the sponsorship of the National Foundation for Infantile Paralysis. For five days the leading polio brains and talent of the world were gathered under one roof and every

CLINICAL COURSE OF POLIOMYELITIS



aspect of the problem was thoroughly and informally discussed.

"Respirators are in adequate numbers throughout the various states. Every Health Officer knows where they are and how they can be brought to the patient expeditiously.

"Recently there has been much publicity given to the operation of tracheotomy. It appears that it is indicated as a life saving measure in special cases of laryngeal obstruction.

"There is no doubt that there is "a certain intuition born of experience" which assists the well trained physician greatly in predicting the outcome of a specific case.

"There is no scientific evidence to prove the value of area or geographic quarantine. Likewise, there is no scientific proof that the spraying of whole communities with DDT or similar products will prevent or minimize an outbreak.

"Not all clinical non-paralytic polio is due to the virus of poliomyelitis. Chief among these are mumps, meningomyelitis or encephalitis.

"Another new entity, the virus of which was described by Dalldorf and Sickles was recently confirmed by Melnick et al. Fortunately these diseases which resemble clinical polio are not usually associated with crippling or death.

"Fewer than 1 in 3000 of the total popula-

tion are attacked by polio and fewer than 1 in 1200 of children's population. One-third of the population is under 15 years of age. Eighty percent of the cases of polio are in children under 15 years of age which means about 1 child in 1250 will get polio.

"The subject of polio has received too much and too little attention.

"In those communities where the disease is not common, both the profession and the laity have almost ignored it. On the other hand, in those communities which have suffered the misfortune of an outbreak of the disease, there is prone to develop very quickly a mass hysteria.

"Here we have a disease where the infection is not as dreadful as one of its complications viz., paralysis or crippling. It is the paralysis that makes polio the dreaded disease.

"Fifty years ago polio was practically unheard of in this country. However during the last four decades the country has witnessed several large epidemics. Clinical experience with the disease has made it possible to recognize more and more cases very early in the course of the infection.

"Prompt and adequate treatment during the early stage decreases both the incidence and severity of the paralysis.

"Immediate muscle care and protection will

prevent deformities and limit the disability to that caused by the destruction of nerve cells.

“Scientific physical therapy and judicious orthopedic surgery will rehabilitate even those who are extensively crippled so that they might assume useful roles in life.

“There appear to be several strains of viruses capable of causing polio and paralysis. They differ in virulence, degree of infectivity and antigenic properties. Formerly it was agreed that the disease could be reproduced only in the rhesus monkey. However, it can be reproduced characteristically and regularly in the cotton rat, the white mouse, the hamster, the chimpanzee and in several species of monkeys.

“Due to the absence of a specific test for polio virus infection, the diagnosis of non-paralytic polio is still a problem.

“We need a rapid accurate test that will make the diagnosis in the preparalytic stage. This test will be either: A complement fixation test, A microscopic test, A colorimetric test, or An electronic test.

“The Health Talk Release from the Educational Committee of the Illinois State Medical Society dated August 7, 1949, should be read by every physician and nurse.

“Every physician, public health worker and nurse should get and use the “Physician’s Manual on Infantile Paralysis”, Circular No. 87, published by the Department of Health of the State of Illinois, written by S. O. Levinson and Philip Lewin.

“I wish to take this opportunity to compliment the work of the public health agencies and their personnel, all of whom have contributed great service.”

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If the medical profession of America values its personal freedom, each doctor must fight against passive acceptance of the “status quo.” It is our duty to the American people, and to ourselves, to protect our system of free enterprise.

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| | of Fildes painting, for office display | |
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MEDICAL ECONOMICS

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Campaigns for Funds and the Doctor

Philanthropy as a part of medical practice is probably as old as the practice of medicine itself. In feudal days, the monarch proffered the services of the court physician not only to his royal household, but often to the sick poor who came to his attention. The medical schools of early universities received grants from individual, government, or church sources and this practice has been continued over two centuries to our own modern times. The Rockefeller Foundation, the Guggenheim fund, and the Duke Foundation are examples of individual or family philanthropy of our modern era.

More recently, a new facet has been added to medical philanthropy, the collection of large annual funds by various associations, such as those concerned with tuberculosis, poliomyelitis, cancer, and heart disease. The success of these ventures indicates the tremendous interest of the public, including those who contribute large amounts down to the smallest donors. Medical organizations, national or local, and physicians as individuals are assuming significant responsibilities in the collection, and disbursement, of

these funds. The donors should, and probably shall, at some future date, review professional activity and the end result, more or less critically.

The collection of these large annual funds has been primarily by councils, composed of men and women of prominence, and physicians of local and national reputation, under the jurisdiction of a definite medical organization. The methods employed involve private solicitation from donors, seals, tag days, collection boxes, public dinners, public appeals, mail queries and other methods. Utilization of the public press, newspaper and magazine, the radio, the movies for publicity purposes have been widely employed. On occasions, special agencies, who are skilled in advertising and fund raising have been employed. Physicians have generously contributed not only their time and energy but money to these projects. The public response has been little short of unanimous, and certainly generous. Substantial funds have been accumulated.

The disbursement of the funds accumulated has probably been less publicized than the collec-

tion methods. A portion must be allotted to expense of advertising and administration. Education of the lay-public regarding the individual diseases has taken a portion. This has been accomplished by lectures, magazine articles, leaflets, signboards, radio talks, slogans, and advertisements. Examination, hospitalization, and treatment of afflicted patients accounts for a certain percentage. Research has been awarded a share.

The results of these disbursements could not be tabulated with accuracy. None would question that the public has not been educated as the danger of cancer, tuberculosis, heart disease, or infantile paralysis. Criticism has arisen that the education of the lay-public has been over-emphasized and the hypochondriacs rendered more apprehensive and emotionally stable individuals made fearsome over minor complaints. Many projects of a research nature have been underwritten in many areas throughout the United States. Possibly these studies will prove of great merit and serve as the foundation for further efforts that will yield more tangible re-

sults in a period of years. No dramatic discoveries have been reported, however, of worthwhile merit, to the public or the physicians.

Another phase of this situation is the ultimate effect of these philanthropic drives upon the public relationship of the profession and the laity. Ewing and those affiliated with him have criticized our present method of practice and one must admit he has had many listeners, and some believe we are in a defensive position rather than an offensive one.

A discovery of the cause or cure of cancer, for example, would be a substantial influence in retaining our present method of practice. Failure to show gains in conquering cancer, heart disease, or poliomyelitis from one year to another may react to our detriment.

Under any circumstances, the profession, individually and collectively, has accepted formally or informally a significant responsibility for their part in these philanthropic drives. No one should deny that we should inventory our position, more critically, than we have up to date.—C. C. M.

ONE HUNDRED YEARS OLD—AND STILL GOING STRONG

(Thus) we may say that normal senility is characterized by an absence of those disharmonies and deviations from the normal which we call disease. In contrast to this we see in the various syndromes which characterize pathological senility; evidence of many and varied disharmonies. In spite of senile withering, in the "macrobiotes" whom we have observed, the whole organism has endured as a definite physiological unit. Moreover these people have continued their lives as definite personalities with all their characteristic individual features. It is also well worthy of note that they have as a rule been able to adapt themselves to the decrease in capabilities and physical strength without protest or vain attempts to resist the inevitable. Life with them has proceeded more and more in the

tempo of adagio, dominated at all times by a mental and vegetative calm. Thus it becomes quite easy to comprehend why these very aged people have in the great majority of cases continued their activity with a certain ability to work and with enjoyment and, in short, have been able to lead ordinary lives. . . As a result of these studies we may come to the conclusion that 100 to 120 years should be the normal span of human life. Unfortunately up to the present this age has been reached in rare instances only. Premature senility and death has been the rule. Therefore efforts to achieve longevity need not be directed toward an attempt to prolong the span of human life but rather toward measures calculated to prevent premature pathological aging and premature death.—*Excerpt, Centenarians, The Syndrome of Normal Senility, Basylewicz, Ivan, M. D., R. I. Med. J., June 1949.*

STATE DEPARTMENT OF PUBLIC HEALTH



National Hospital Day

Roland R. Cross, M.D.,
Director, Illinois Department of Public Health

From the mind of a citizen of this community, Matt Foley, I understand, the idea emerged that there be a National Hospital Day. Wisely, May 12, the birthday of Florence Nightingale was designated as the special date.

In all that has to do with hospitals, Florence Nightingale was a very special person. Most people, to be sure, rightly associate her name with the establishment of schools of nursing and most people picture her as the lady with the lamp quietly walking through the wards at night attending to the physical and spiritual needs of the sick. The nurses here know that from her well-groomed mind and from her enormous experience and careful evaluations there evolved the principles and ethics of the art and science of nursing.

Great and lasting though her contributions to nursing are, Florence Nightingale should be remembered for more than these alone. She was an unusual woman for her time, and as a matter of fact, an unusual person for any time. She had

the enviable gift of quick and accurate perception; she could see right through to the very bottom of problems, however complex and difficult they might be. She had the ability and the drive to set forth in an orderly fashion the necessary corrective measures. Her recommendations were always clear, rational and practical. Most of her recommendations are as good today as they were nearly 100 years ago when she published them in her scholarly volume entitled "Notes on Hospitals."

This is an interesting volume, now a rare book and a classic on the subject of hospitals. It was first published in about 1853 and the volume which was loaned to me through the kindness of the Bacon Library of the American Hospital Association is the third edition, published in London in 1863. Every page is a treasury of astute observations which are particularly meaningful to the workers in hospitals who are concerned about the principles of public health as well as to the workers in public health who are concerned in the problems of hospitals. It was,

Presented at Hinsdale, Illinois, May 15, 1949.

therefore, almost 100 years ago that through the insight of this remarkable woman the ideals of the two closely related fields of hospitals and public health were considered as one.

In the opening sentence of the preface of the third edition, Miss Nightingale says:

"It may seem a strange principle to enunciate as the very first requirement in a hospital that it should do the sick no harm."

She then proceeds to discuss the sanitary condition of hospitals. She analyzes the harm that may come from "the agglomeration of a large number of sick under one roof" and advocates as the remedy, stern adherence to sanitary standards. Chief among these sanitary standards is adequate daylight and ample air-space per patient, sufficient space separating patient beds, and sufficient installations of sanitary plumbing. She emphasizes the importance of appropriate hospital kitchens and laundries and satisfactory space for the accommodations for the house staff. Her comments on site selection for the hospital are extra-ordinary and her references to atmospheric pollution sound like the articles we read on the subject today. She stresses the importance of hospital design to the welfare of the patient and for the convenience and economy of operation. She gave serious thought to the number of nurses and helpers needed to care for certain sized groups of patients. She has a great deal to say on the subject of hospital architecture and pays particular attention to designing construction so that maximum use is made of available sunlight. She had a critical eye for economy and recognized that some of her principles might be rejected because they involved more initial expense, "But," she interjects, "It so happens that the safest care is, in reality, the most economical mode of construction."

In the chapter on principles of hospital construction, she emphasizes design that is conducive to the smooth functioning of the plant. She advocated allotting 80 square feet of floor-area per bed, which is precisely the figure in use today. She points out that walls and ceilings should be of impervious material that will lend itself to painting and cleaning with soap and water. "Ward floors should be made of concrete or some similar indestructible surface." These concrete floors over "wrought iron joists" she explained, "are consequently fireproof as all hospital floors ought to be." This last I repeat, she said in 1863.

"These illustrations of hospital construction, when compared with what has been the past practice in this country (England) will show at once what ought to be done, and what ought not to be done, in planning buildings to be occupied by sick or maimed."

"Some recent plans, however, have alas! reproduced all the old errors in a novel form. **** Mistakes such as these can only be avoided by a very careful study and application of the principles laid down. It should never be forgotten that the first thing to be considered is what is best for the sick, not what may appear to be cheapest — for cheapness is only apparent, not what will make a good architectural elevation, for this is a point quite beside the question.

"The very first condition to be sought in planning a building is, that it shall be fit for its purpose. And the first architectural law is, that fitness is the foundation of beauty. The hospital architect may feel assured that, only when he has planned a building which will afford the best chance of speedy recovery to sick and maimed people, will his architecture and the economy which he seeks, be realized."¹

These were splendid ideas and doubtless they figured in the growth of hospitals that came with the era of antiseptic surgery. Chances are that "Notes on Hospitals" was widely read, but from the evidence in existing constructions, built since 1863 in Illinois as well as in other places many of these fine guiding principles were not put into use.

Today, after almost 20 years of restricted building of hospitals due first to the depression and then to the war, we are engaged in a great movement of expanding our hospital facilities. Are we building wisely? Are we building purposefully? Or are we merely building buildings? The words of Ralph Waldo Emerson written many years ago are particularly pertinent to the ideals of construction needed for the modern hospital. Emerson said, in two beautiful lines:

"He builded better than he knew

The conscious stone to beauty grew."

In 1863, Florence Nightingale said, for all to read, that hospitals should be constructed of "concrete and wrought iron" for safety against fire. But until the period after World War I

1. Notes on Hospitals, page 106

almost all hospitals were built with wood-floors and wooden major partitions. After 50 years, the need for fire resistiveness in these particular constructions is fairly generally and satisfactorily appreciated. The same cannot be said with regard to floor space per patient. The 80 square feet of floor area specified per adult bed by Florence Nightingale in 1863 is the present day standard of public health authorities and is so spelled out in the regulations that govern the grant-in-aid construction program under Public Law 725. We now have gone a step farther and have defined the space requirements for infants and children. There is, however, less appreciation of the need for these standards of space-per-patient than for the standards of fire-safety. Patients who are crowded too closely together have an increased risk of cross-infection. When hospitals are overcrowded beyond the capacity for which they were originally constructed every fiber of the hospital plant and services is put under the same nature of strain that occurs when a bridge, built for certain tonnage, is over loaded. The hospital building, to be sure, probably will not collapse but the services and safety factors might very well give way. The risks from overcrowding and the attendant difficulties of administration were clear to Florence Nightingale and after applying the proper corrective measures to the Army barracks hospitals in the Crimea in 1854-1856, she reduced the mortality from 42 per cent to 2 per cent, all in the space of a few months. Yet, we still overcrowd our hospitals beyond all reasonable limits in order to meet the increasing demands for in-bed care.

Over and beyond the ideals that were recorded by Florence Nightingale, there are now some added principles that have evolved through the growth of medical knowledge and public interest in health. The hospital is growing to be considered less of an end point in a chain-reaction of health services than as the starting point of the web of health services. For example, it is not the end point of the nine months period of pregnancy, but rather, it is the beginning, the wholesome, healthful starting point of the normal mother-child relationship. Through the classes for expectant parents, through the manifold teaching opportunities for new mothers and fathers, the health education functions of the hospital assume importance almost if not equal

to the importance of the delivery room-suite.

In fields other than maternity, all hospitals, not only the university teaching centers, can serve the community as the fountainhead of curative and preventive medicine, of education and of research. The hospital of today and certainly of tomorrow is more than a place for in-bed cases; it is the potential nucleus of all positive community health activities. In its libraries, laboratories, conference rooms, surgical theaters, rehabilitation and other facilities, the physicians may continue their life of professional services on the same high academic plane that they do in the school of medicine. Other health service personnel and the patients themselves may share in the aura of this spirit. The hospital is not a mere health factory, a place where handiwork of various sorts is available; it is rather a place of interpretative health service and health evaluation.

We are perceiving a shift from the old concept of a hospital as a hotel with clinical services to the newer idea that a hospital is essentially a polyclinic with beds for those cases that require them. This fine distinction in terminology requires a considerable distinction in construction pattern.

It is becoming apparent that the beds are not nearly so important an item as formerly and that the collateral facilities — the laboratory, the x-ray, the physiotherapy and occupational therapy, rehabilitation services, social services, ambulatory patient service and home follow-up of admissions, are the things that the patients are needing. An appendectomy a generation ago meant ten days flat in bed. Today the average case with an appendectomy or even more extensive procedures is ambulatory in little more than a day following surgery.

New mothers are getting up at three to five days after the baby is born and in some hospitals most obstetrics cases go home from the hospital within a very few days after the birth of the baby.

These and many other practices are all in the nature of progress. If the hospital were only a building, the problems of patients who go home early would be an item beyond the concern of the administration. But if the hospital is to be considered a force in the web of

community health services, something more than a hotel for invalids (to use the name of a famous old French Hospital); if the hospital is to be a channel through which it is possible for community health services personnel to act, then, in the words of Florence Nightingale, the physical plant should be "fit for its services."

The number of services that should be in a hospital or be closely related to a hospital is enormous and is increasing at a very rapid rate. It is my impression that the orderly mind of Florence Nightingale would indeed be dismayed over our unorganized services and over the way in which we have splintered our health resources and our health problems. I think, however, that she would be proud of the great gains which have been made in the medical and allied sciences

and that she would regard our current pattern of duplications and gaps as but a challenge to the medical administrator who appreciates the strength which may come from coordination.

National Hospital Day is a time when the people of each community can make a special effort to find out in what ways their community hospital as an agent of community health services can assist them in illness and in health and in what ways they can assist their community to have the best possible hospital care. It is also a time when those in whom the trust of the hospital is placed may take a fresh look at the health problems of the community and with the people concerned in both the giving and receiving, reach for ever higher and higher goals of happiness and well-being.

THE COMMON COLD AND BACTERIAL INFECTIONS

There is no specific vaccine for the common acute respiratory infection of virus and bacterial origin. The use of bacterial vaccines containing respiratory disease pathogens and common flora of the nose and throat has not proved effective. Studies by Diehl and associates have shown that such preparations given either orally, subcutaneously, or instilled into the nasal passages elicit no specific resistance to respiratory tract infections. Summarizing the accumulated data up to December, 1944, on the use of bacterial vaccines, the Council on Pharmacy and Chemistry and the Council on Industrial Health of the American Medical Association conclude that "Decisive evidence of the value of any vaccine is not forthcoming and the weight of careful studies clearly indicates that none of the vaccines now available when administered by routes as advised have proved of value." Therefore, vaccines for "colds" cannot be recommended for administration to industrial groups, student groups, or to individuals. Any attempt to prevent colds by the use of bacterial vaccines must be considered purely

experimental. Likewise, there is no evidence that vaccination with Influenza A & B virus vaccines protects against the "common cold" or respiratory infections of bacterial origin.—*Excerpt, The Problem of Control of the Respiratory Tract Infections, Clayton G. Loosli, M.D., Chicago, The Journal-Lancet, July, 1949.*

Primitive people went to the hills in the summer to enjoy the out-of-doors, to bask in the sun, light and mild temperature denied them in the winter, in the valleys, where they sought refuge from winds, storms, cold and humidity. When they found a climate and environment suitable to their needs, with weather not too changeable, they settled down to make themselves physically fit for the business of life as they found it. They thus practised preventive medicine which is vitally concerned with weather, climate, ecology, nutrition, housing, clothing, warmth, rest, relaxation, recreation and outdoor exercise.

Excerpt, Physical Medicine for Rehabilitation and Prevention of Ill Health, Madge C. L. McGuinness, M.D.; New York Medicine, July 5, 1949.

CORRESPONDENCE



POSTGRADUATE COURSES OFFER REQUESTED SUBJECTS

The Postgraduate Courses offered by the Chicago Medical Society represent one of the newer activities of the Society. The first two one-week courses were offered in 1947. Similar courses were arranged for 1948. This year, 1949, two additional courses are being offered the physicians of the country.

The courses being offered this fall cover subjects requested by those taking the previous courses:

October 17-22, 1949 — **CARDIO-RENAL AND PERIPHERAL VASCULAR DISEASES.**

October 24-29, 1949 — **OBSTETRICS, ENDOCRINE-GYNECOLOGY AND STERILITY.**

The courses will be given in Thorne Hall, Lake Shore Drive and Superior Streets. The fee for each week is \$50.00.

One advantage of the courses offered by the Chicago Medical Society is that the faculty represents not only the medical schools of Chicago but also other leading medical schools of the country. Here physicians have an opportunity to hear and meet some of the out-standing authorities and to discuss with them their individual problems.

The courses are outlined to cover as much information as possible within the five and a

half day period and to bring both the general practitioner and the specialist up-to-date. Fifty-four lectures will be given each week by a faculty of twenty-eight well known teachers. There will be round tables, clinical-pathological conferences and opportunities for those taking the courses to meet and talk with physicians from all sections of the country.

There will be one evening program in connection with each course.

Illinois physicians who are interested in taking advantage of this opportunity should write Dr. Willard O. Thompson, Secretary, Committee on Postgraduate Medical Education, Chicago Medical Society, 30 North Michigan Avenue, Chicago 2.

GONORRHEA SMEAR NO LONGER REQUIRED BY MARRIAGE LAW

On July 23, 1949, when Governor Stevenson signed Senate Bill 473, the law in relation to marriages was amended, effective at once, by removing the requirement of a microscopical examination for gonococci. The law was changed to delete the microscopic slide test for gonorrhea because, as it is quite generally known, this test is not considered reliable. The smear test fails to detect a considerable percentage of known positives. Furthermore, the newer drugs, particularly penicillin and the sulfonamides, can within a few hours remove all evidence of infec-

tion and minimize the health risk to either party of the marriage.

The Department of Public Health is sending to all County Clerks and all physicians in Illinois a notice to the effect that the marriage law has been amended.

The Department requests the cooperation of physicians in omitting the routine submission of slides for gonorrhea in connection with premarital examinations. The laboratory service of the Department will continue to provide smear and culture diagnosis for gonorrhea in cases at the discretion of the physician.

Please note that the premarital test for syphilis (serological test) is still required.

OCTOBER CLINICS FOR CRIPPLED CHILDREN

Twenty-one clinics for Illinois' physically handicapped children have been scheduled for next month by the University of Illinois Division of Services for Crippled Children. General clinics, providing diagnostic orthopedic, pediatric and speech and hearing services, will be held in 14 cities. Four clinics for children with or suspected of having rheumatic fever and one clinic for those afflicted with cerebral palsy will be held in addition to the general clinics.

Attendance figures at July clinics reveal that 711 children attended the general clinics, 43 visited the rheumatic fever clinics and 16 were seen at clinics held for the benefit of the cerebral palsied children. Attendance at the latter two types of clinics is by invitation only.

Clinics are held by the Division in cooperation with local medical and health organizations, both public and private. Clinicians are selected among private physicians who are certified Board members. Any private physician may refer or bring to a convenient clinic any child or children for whom he may want examinations or may want to receive consultative services.

The October schedule is listed below:

- October 4—E. St. Louis, St. Mary's Hospital
- October 5—Chicago Heights, St. James Hospital
- October 6—Hinsdale, Hinsdale Sanitarium
- October 6—Flora, High School
- October 11—Peoria, St. Francis Hospital
- October 11—E. St. Louis, Christian Welfare Hospital

- October 12—Glenview, Village Hall
- October 13—Springfield, St. John's Hospital
- October 13—Elmhurst Rheumatic Fever, Elmhurst Community Hospital
- October 13—Cairo, Public Health Building
- October 14—Chicago Heights, Rheumatic Fever, St. James Hospital
- October 18—Danville, Lake View Hospital
- October 19—Elgin, Sherman Hospital
- October 20—Rockford, St. Anthony's Hospital
- October 20—Jacksonville, Our Savior's Hospital
- October 25—Peoria, St. Francis Hospital
- October 25—Effingham Rheumatic Fever, American Legion Home
- October 26—Springfield Cerebral Palsy, St. John's Hospital
- October 27—Normal, Brokaw Hospital
- October 28—Chicago Heights, Rheumatic Fever, St. James Hospital
- October 28—Litchfield, St. Francis Hospital

"YOUR MENTAL HOSPITALS" TYPES OF MENTAL ILLNESSES

A study was made by the Research and Statistical Division of the Illinois Department of Public Welfare on the various diagnostic groups of mental illnesses. It was felt that these figures would be of general interest inasmuch as they depict the annual admissions and the resident population of Illinois State Mental Hospitals.

Chart I represents 12,800 patients admitted during the twelve month period. This circle is divided into groups based on the types of mental illnesses. Chart II is a listing of major diagnostic groups of mental diseases. Chart III represents the actual resident population of the nine State Mental Hospitals and reveals the diagnosis of 34,000 resident patients.

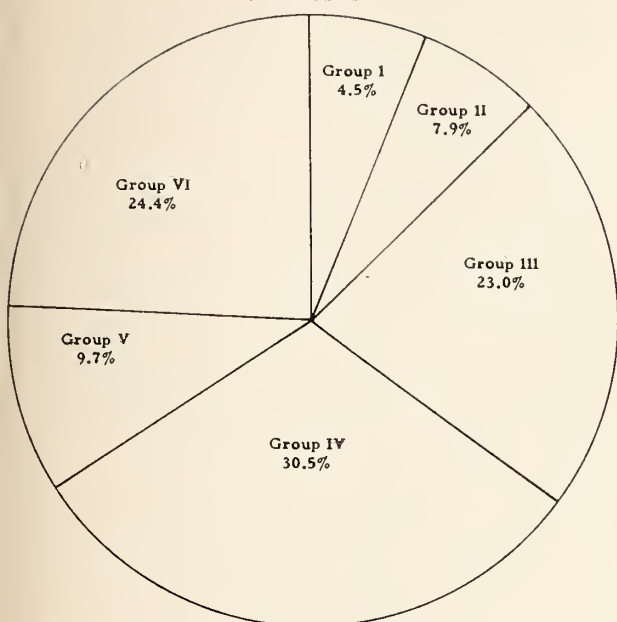
It is interesting to compare the admissions with the resident population.

Group I, representing mental illnesses associated with syphilis, forms 4.5. percent of the admissions and 7.1 percent of the resident population.

Group II, which consists of the alcoholic psychoses, forms 7.9 percent of the admissions but only 3.3 percent of the total resident population.

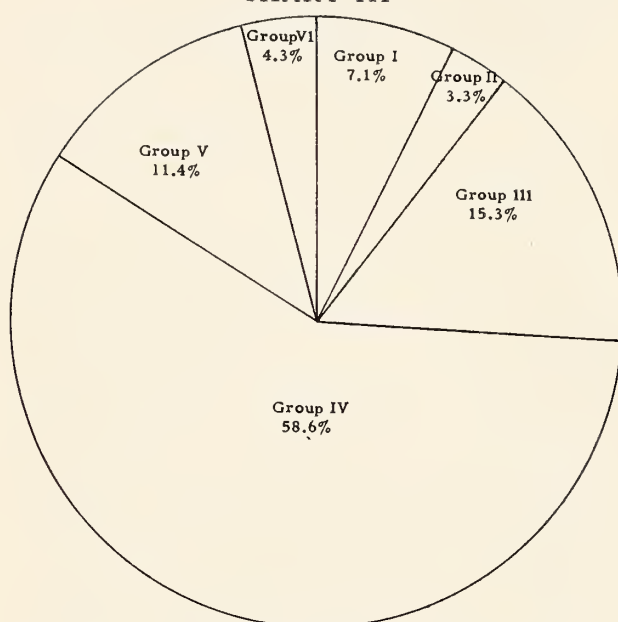
Group III includes the arteriosclerosis and senile patients with mental illness and forms 23 per cent of the admissions and a resident population 15.3 percent. These patients are admitted

CHART I



Admissions to Illinois State Hospitals for the Mentally Ill:

CHART III



Total Population Present in Nine Illinois State Hospitals

late in life, many are in very poor physical condition at the time of admission and the hospital stay is limited.

Group IV, involving the functional psychoses, forms 30.5 percent of the admissions, but forms the large bulk of the resident population of the State Hospitals, namely, 58.6 percent. This is true throughout the United States.

Group V, representing the mental illnesses associated with other diseases' processes, forms 9.7 percent of the admissions and 11.4 percent of the resident population.

The last, Group VI, are patients who are ad-

mitted to the mental institutions without a true psychosis but suffering with mental disturbances which require mental hospital care. These include the psychoneurotics psychopathic personalities and drug addicts, etc. They comprise 24.4 percent of the admissions and because of their short hospitalization only form 4.3 percent of the resident population.

The duration of hospital stay varies with the type of mental illness and its prognosis.

G. A. Wiltrakis, M.D.

Deputy Director

Medical & Surgical Service

CHART II
MAJOR DIAGNOSTIC GROUPS FOR MENTAL DISEASES

- | | |
|--|--|
| <p>I. Psychoses with syphilis
 General paresis
 With cerebral syphilis</p> <p>II. Alcoholic psychoses</p> <p>III. Diseases of the senium
 With cerebral arteriosclerosis
 Senile</p> <p>IV. Diseases of psychogenic origin (or without clearly defined tangible cause or structural change)
 Functional psychoses
 Dementia praecox
 Manic-depressive psychoses
 Paranoia and paranoid conditions
 Involutional melancholia
 Psychoneuroses and neuroses
 With psychopathic personality</p> | <p>V. Other diseases with psychosis
 With Huntington's chorea
 With brain tumor
 With other brain or nervous diseases
 With pellagra
 With other somatic diseases
 Traumatic
 Epileptic psychoses
 With mental deficiency
 Undiagnosed and unknown
 Due to drugs, etc.</p> <p>VI. Without psychosis
 Epilepsy
 Alcoholism
 Drug addiction
 Psychopathic personality
 Mental deficiency
 Others</p> |
|--|--|

WOMAN'S AUXILIARY PRESIDENT'S MESSAGE 1949-1950

As we begin the new Auxiliary year may I extend to all members a sincere wish that you will become enriched by Auxiliary friendships, and that all of you will further the aims, purposes and ideals of the Auxiliary.

This year should be a year of study and service; this year is a critical year and your obligation must be to build up a background of information that will act as a bulwark against any force which may endanger the place of the Doctor in our country. This year should not be a year of entrenchment but a year of aggression. We must be on the offensive so let each and every one of us be a Crusader against the forces that would destroy our heritage of free enterprise.

We can equip ourselves for the crusade only by acquiring a "speaking knowledge" of authentic information and this should be acquired through study, discussion and lectures. Our influence will have maximum strength only if we are able to take the message of medicine to the peoples of our communities and thus give them

the A. M. A.'s answer to the President's Compulsory Insurance Plan. We also must promote and familiarize ourselves with the voluntary prepayment medical and hospital care plans.

As in former years we must continue with our work on the benevolence fund. May our efforts make this fund sufficient for "social security" for all who may need it. We are fortunate in having the opportunity of improving health standards through educating our citizens by encouraging the reading of Hygeia. Especially in schools is this factual source of information conducive to a better understanding of honest health information.

As our membership grows so does our work and our responsibilities. Let us work toward a goal of an Auxiliary in every county and a member of every doctor's wife.

May the year just ahead of us be a happy and successful one. As your President, I pledge to you my complete support in all your undertakings.

Mrs. E. M. Egan, President

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DOCTORS' DILEMMA

To The Editor:—

Physicians in Chicago and Illinois are faced with a challenging problem regarding the fine health radio show, *It's Your Life*. To bring it to your attention in this way may raise the eyebrows, and even the blood pressure, of some of

us. But challenges must be met and dilemmas faced.

Never before in the history of American medicine have our public relations been so important. Never has preventive medicine attained such great significance, together with health education, its cornerstone. This radio show is proving to be both ambassador and teacher.

In a powerful yet simple presentation, ordinary people, in their own unrehearsed words, tell how they have met and solved their health problems. It is heard, at present at 3:30 on Sunday afternoons over Station WMAQ, Chicago. Over 140 of these programs have been presented since October 18, 1948, and the series has allready received four national and one local award.

The program is dedicated to the benefit of the public and has received enthusiastic approval from both doctors and patients. It might have been dedicated to the medical profession as well, since its implications in medical public relations are obvious. What can bring to the public a stronger realization of the quality of existing medical services than the experiences told by patients themselves — of cancer cured by early diagnosis and efficient surgery, of tuberculosis checked and arrested in its incipency, or of a helpless blue baby restored to normal life?

It's Your Life is produced by the non-profit Chicago Industrial Health Association and sponsored by Johnson & Johnson. When it completes its first year on the air in October it will have cost the sponsor more than \$100,000. Their public spirited attitude has been unique in radio history. They have received thanks and praise. They have shared in some of the show's extensive national publicity. But the sale of their products has not increased appreciably in this area during the past year. That is the difficulty.

Can we expect the sponsor to continue to give us this fine program and to extend it for national hearing unless they receive some tangible return on this large investment?

Our profession is deeply indebted to Johnson & Johnson for making this program possible. It is highly desirable that we be articulate in expressing our appreciation. If there is no ethical or financial consideration involved, if the sponsor's products meet necessary standards, is it not fitting that we meet our responsibility

toward this program realistically and in a practical manner?

The physicians in this area would miss It's Your Life. We should be able to keep it on the air.

AMERICAN ACADEMY OF NEUROLOGY

The American Academy of Neurology held its first national scientific meeting at French Lick Springs, Indiana on June 1, 2 and 3. Almost 300 attended the sessions, during which some 38 scientific papers were presented. Highlighted were practical clinical studies and retraining therapy of the neurologically disabled patient. Major General Paul R. Hawley addressed the membership on "The Place of Neurology In American Medicine In The Future."

The American Academy of Neurology was founded two years ago in response to a growing need for a national organization to actively foster the progress of clinical neurology. Growth of this relatively young organization has been rapid, and it now has over 700 members. At the French Lick Meeting, the Academy adopted a resolution requesting that neurology be adequately represented under the National Mental Health Act.

Current officers of the Academy are: Dr. A. B. Baker, President; Dr. Pearce Bailey, Vice-President; and Dr. Joe R. Brown, Secretary-Treasurer. Dr. Pearce Bailey, of Washington, D. C., is the President-elect and Dr. Howard Fabing, of Cincinnati, Ohio, is the Vice-President.

All communications should be addressed to Dr. Joe R. Brown, Secretary, American Academy of Neurology, Mayo Clinic, Rochester, Minnesota.

GASTROENTEROLOGISTS MEET IN BOSTON

The National Gastroenterological Association will hold its 14th Scientific Session at the Somerset in Boston, Mass. on October 24-26, 1949.

Immediately following the Convention on October 27, 28, 29, 1949, the Association is sponsoring a course in Gastrointestinal Surgery at the Boston City Hospital.

Further information concerning the program and details of the course may be obtained by writing to the Secretary, National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.



Doctors of the Alexander County Medical Society carried out an effective educational campaign when they secured the cooperation of all the druggists in the installation of window displays depicting the

dangers of political medicine. Pictured is the window of Bryant's Drug Store in Cairo. Other county societies could easily duplicate this wise program.

COUNTY SOCIETY ENLISTS DRUGGISTS' AID

To the Editor:

Enclosed please find a photograph which you requested concerning the window display about which I wrote to you some time ago. Our society in Alexander County is having each drug store prepare a window display using the picture of the doctor as a background. They also use the many pamphlets that have been released from your office as well as from Whitaker and Baxter.

Each drug store was more than glad to render

their services in this way to fight political medicine.

I have noted that these window displays have created quite a lot of interest, and one would be surprised how many individuals stop and look at such a window.

When I first secured this idea it was my opinion that such a display would be more effective than for each physician to high pressure his patients during office hours.

We shall continue to carry on the fight to the limit.

Paul S. Baur, MD.
Cairo, Illinois.

POLIOMYELITIS

Probably primarily a contact disease such as influenza or chicken pox.

The virus has been recovered from flies, and although they may be a factor in the dissemination, they are not considered as playing an important role in spreading the disease.

Like several other diseases, such as measles, the cases frequently begin in a mild form and may be overlooked. The incidence rises to a peak, then gradually tapers back to normal.

Poliomyelitis is predominantly a hot weather disease, although it may be seen in cold weather. It has been shown experimentally that some strains of the virus retain full infectiousness after being frozen as long as one year.

Early symptoms may be a headache, fever, muscle stiffness in neck or shoulders, or perhaps a digestive upset.

Children with even a slight infection of polio should be put to bed. It is always advisable in times of epidemics to protect children from chilling and from fatigue.

Comparatively few of these patients become paralyzed.

In most epidemics, most of the polio deaths are from the adult age group (16 or over). In one series of 250 cases recently reported among 80 children under age of 6 with polio had no mortality. 70 between the ages of 6 to 10 had two deaths; then as the age increased, the greater the mortality.

Because an industrial environment is supposed to be dirty, grimy, and dusty, it has, out of ignorance, been accused of being an incubator for tuberculosis. Such thinking disregards vital components outside of the working environment of the employee, such as the economic factor, living conditions, congested housing, improper nutrition, financial insecurity with all its attendant worry, personal and community hygiene. Rutherford T. Johnstone, M. D., *Am. Rev. Tuberc.*, Oct., 1948.

A large share of the success in controlling the disease (tuberculosis) over the years should probably be credited to the intensive educational campaign through which the average person has been taught the importance of early diagnosis and treatment, the recognition of the characteristic symptoms, and the measures to be taken to prevent the spread of the disease. The large number of tuberculosis clinics and sanatoria have also played an important role in saving the lives of tuberculous patients. Louis I. Dublin, Ph. D., *Health Progress* 1936 to 1945, Metropolitan Life Insurance Co.

NEW ACNE TREATMENT PREVENTS SCARRING

A new method of treating common acne with dry ice clears up lesions of the disease with little or no scarring, report two Philadelphia doctors.

More than 2,000 acne patients have been treated by the method with good results, Drs. Carroll S. Wright and E. R. Gross say in a June issue of *Archives of Dermatology and Syphilology*, published by the American Medical Association.

Small pieces of dry ice are applied directly to the acne pustules for from three to five seconds, they explain.

If the lesions are numerous, a large piece may be applied over a group of lesions. Since the lesions are usually elevated, the skin between them is untouched if the right amount of pressure is applied.

"Within a few hours there may be surface vesiculation [blistering] over the pustule; this is followed by drying and general shrinkage of the treated pustules which usually will result in their involution in from one or two treatments with little or no scarring," the doctors write.

"Deep cystic lesions may require a number of treatments, the number depending on their depth."

SYSTEMIC THERAPY URGED FOR ARTHRITIS

... It should be constantly borne in mind that all cases of arthritis should be treated from the outset in the way that all systemic disease involving the whole body should be treated, i. e., by giving the body economy an optimal opportunity for normal physiologic equilibrium to be established. This is not a scrap basket recommendation but something to be interpreted literally and carried out with fidelity. There is no single remedy indicated for the treatment of arthritis. A coordinated approach is the only one which may be expected to achieve significant results in any large group of arthritics. Most refractory cases of arthritis are refractory because they have been inadequately cared for at the outset.

Excerpt, Treatment of Arthritis, Ralph Pemberton, M. D., Philadelphia, Pa.; The Pennsylvania Medical Journal, April, 1949.

No subject is more intimately connected with the happiness and prosperity of a people than the degree of public health that they enjoy. Lemuel Shattuck, Chairman of the Massachusetts Sanitary Commission, 1851.

ORIGINAL ARTICLES



Lessons Learned in the Effingham Hospital Fire

W. J. Gillesby, M.D., F.A.C.S.
Effingham

The St. Anthony's Hospital fire disaster of April 4, 1949 has been adequately covered by the press. As doctors we must profit by our mistakes. Wars and other disasters all leave a few lessons if we're alert. The price is a terrible one to pay but we are entitled to what little lessons we can learn.

Our responsibility to our patients makes our duty clear. We must be able to assure our patients that we are sending them to a safe institution. Legally we are not responsible but morally we are definitely so and our patients expect us to be well informed.

St. Anthony's Hospital was constructed better than many hospitals and as well as most. The conditions that made the disaster possible are present in all too many institutions in this country. Such a disaster makes one very alert to fire hazards and I have been amazed since the fire, at the conditions in many other hospitals and public buildings.

The points presented here are not new, but obviously need emphasis from time to time.

The chimney or flue effect of open stairways in buildings is well known. Stairways between floors should be enclosed in stairwells with steel doors at each floor, closed except when in use. They should not be propped open at any time.

Fire drills and actual testing of fire equipment should be mandatory every three months. Fire hose is often checked but water is seldom run through because it is messy and too much commotion frightens the patients! If drills and tests were done often enough, they would be taken for granted and no alarm would ensue.

Cigarette smoking is and will be a problem but it behooves us to constantly warn our patients and present a good example when we smoke. A smouldering cigarette in dirty linen can be a very serious thing. Whether this was a factor in St. Anthony's Hospital fire will never be known, but I present it as a warning and a possibility—anywhere.

Regular rounds by watchmen should be routine and check systems such as used in industrial

plants—time clocks to be punched regularly—would help.

Every city should have disaster plans formulated. During such a disaster confusion reigns. If we had been prepared—we would have had a loud speaker truck at the scene. (Every city has one available for commercial advertising.) The police, city authorities or someone in authority could have directed doctors, nurses and relatives of patients by means of the loud speaker system and much confusion would have been avoided. The patients saved from the fire were placed in private homes or taken to other cities and it was some time before we knew where our patients were.

From the purely medical standpoint the most important lesson learned was a dramatic confirmation of the importance of early ambulation. The following brief histories illustrate this point.

Mrs. M., age 38, was subjected to pelvic laparotomy three days before the fire. She was in a two-bed room on the second floor—some 25 feet above ground level. She had been up and about since the day after operation. When smoke and flames were noted in the hall, Mrs. P. her roommate, a medical patient, tore sheets and lowered Mrs. M. to the ground through the window. Mrs. P. was then rescued by firemen, via ladder. Mrs. M. was not injured in anyway and aside from some justifiable nervousness, has made a complete and uneventful recovery. Had she not been ambulatory, I'm sure her roommate could not have saved her.

Mr. P., age 45, had had a perforated duodenal ulcer with operation in 1932. In October 1948, he was the victim of a massive peptic ulcer hemorrhage. Ulcer pain was intense. In February, 1949, another massive hemorrhage occurred. Because of the intense pain, hemorrhages and length of systems, operation was advised. On April 4th, 1949, a Polya-Balfour resection and bilateral vagotomy was done through a right paramedian incision. Gas and ether were used for anesthesia. The operation was difficult—the separation of the gall bladder and duodenum required tedious dissection and the old perforation was opened during the procedure. Silk interrupted sutures were used for closure. Following operation he was given blood transfusions, gastric

suction was employed and oxygen was administered. He awoke at 11:30 P.M. because of the smoke in his room which was on the first floor—12 feet above ground level. He removed the infusion needle, nasal oxygen tube and nasal suction tube, tore sheets and tied them to his bed, and lowered himself to the ground. He located his wife in the crowd of people outside the building, walked 1½ blocks to his car, lay down in the back seat and his wife drove him some fifty-seven miles to the Olney Sanitarium, Olney, Illinois. His recovery was remarkably unevenful and he has shown no ill effects from his violent experience. His escape was accomplished twelve hours after his major operation had been completed.

One factor that is probably more important than any other is the unpredictable panic that seizes so many people. I am sure some of the ten nursery babies that perished could have been saved by cool heads. The location of fire escapes should be known by all personnel and regular quizzes used to impress the importance of such knowledge. If babies were kept with their mothers, as is being advocated in some centers, the mothers could have saved their own babies at least.

Many ideas have been advanced since the fire as to how the babies could have been saved. Putting the babies in the dirty linen hamper and lowering them out the window was one. One doctor devised a bag use in a chute from the nursery to the ground. My personal belief is that any method must be simple—people in stress time do not act sensibly—and complicated devices will be useless. Another essential is that the method adopted be safe. Many of the ideas advanced would suffocate more babies in minor fire alarms than they could possibly save in a real disaster.

Each institution's problems are unique unto itself and should be thoroughly discussed in staff meetings and administrative conferences. The nursing, side, orderly, and maintenance personnel must all be thoroughly trained for any emergency.

"Eternal Vigilance is the price of Safety."
420 E. Jefferson St.

Acute Appendicitis With Perforation

A Review of the Literature

Charles J. Weigel, M.D., A.I.C.S.
River Forest

Acute appendicitis has a mortality and morbidity rate far in excess of what surgeons the world over feel it rightfully deserves. Cutler¹⁶ in a twenty-five year statistical study gives a mortality rate approximating the norm of all rates given in this review. He gives a total mortality rate of 4.4 per cent. The cases were divided into acute appendicitis with a rate of 1.2 per cent, acute appendicitis with perforation 17.1 per cent, and acute appendicitis with abscess 7.3 per cent. His study covered a total of 2,192 cases.

Fifty-three articles appearing in the literature from 1932 to 1948 were reviewed for the purpose of formulating some method of procedure that would lead to a lower mortality and morbidity rate.

Anatomy. — A review of the major anatomical features of the vermiform appendix is in order, so that the resultant pathology in the diseased organ can be more readily understood.

The appendix springs from the medioposterior portion of the cecum. It is found in several positions, the most common of which are (1) downward over the brim of the pelvis, (2) upward and posterior toward the hepatic flexure, and (3) medially and upward toward the spleen. The length varies from 1.5 cm. to 18 cm. according to Cunningham and is approximately 0.5 cm. in breadth.

The appendix is composed of all the primary layers as the bowel and is richly supplied with lymphoid tissue. The blood supply is from the ileo-colic artery and is terminal. The lymph drainage is controlled by nodes on the cecum, at the ileocolic junction and medially to the glands in the celiac and lumbar regions. It may also drain to glands in the right iliac fossa.

Etiology. — Acute inflammation in the appendix may be (1) embolic from infections in other parts of the body, i. e. septic sore throat, (2) obstruction of the lumen by fecalith, cicatri-

cial stenosis at the cecum, spastic muscular condition, and kinks and adhesive bands.

A large percentage of cases of acute appendicitis with perforation give a history of having taken a laxative. Bower et al⁶ state that in their series 89 per cent had received laxatives prior to admission to the hospital. The mortality rate in the laxative group was 115 per cent higher than in the non-laxative group. The laxatives were either self-prescribed or advised by a physician, druggist or some other second party. Stasis in the appendix leads to perforation and gangrene by an increase in the luminal pressure.

Symptoms and Diagnosis. — The onset is usually sudden and in many cases awakens the patient from a sound sleep. The pain is generalized over the entire abdomen with prominence in the celiac and epigastric regions, and later becomes localized to the right lower quadrant. In those cases where the appendix is retrocecal the prominence of the localized pain may be in the right flank. When the appendix is long and in the right iliac fossa the patient may complain primarily of urinary symptoms with pain radiating sometimes to the right testicle.

The temperature may vary from normal to 104°F. Leukocytosis with a high polymorphonuclear cell count may be present in most instances ranging from 10,500 to 25,000, but if the circulation to the appendix is obstructed it may be normal; therefore, it should not be relied upon as positive proof of diagnosis.

Nausea and vomiting with anorexia are usually present with constipation or diarrhea. The pulse is elevated, and if the process is highly malignant may be over 120 per minute.

Tenderness and rigidity of the right lower abdomen is the rule but in cases of retrocecal appendicitis it may be in the right flank and simulate ureteral colic. Rebound tenderness is usually present but most men agree that the procedure is too dangerous and lends very little

towards diagnosis. Rectal examination should be made in all cases to ascertain the presence or absence of an abscess.

TREATMENT

Pre-operative Treatment. — All authorities are agreed on surgical intervention when an early diagnosis is made, but there are two schools of thought when the case is of forty-eight hours' duration or more, or when peritonitis, local or generalized, is present, or when an abscess can be palpated rectally or through the abdominal wall.

Operative procedure should only be instituted after the patient is in the optimum physical condition. If the patient is dehydrated from vomiting or diarrhea or both, his fluid and electrolytic balance should be restored, he should be given proper sedation, and heat in the form of hot stupes applied to the abdomen. It is felt by some men that the application of heat in this manner decreases the complications of thrombophlebitis by relaxation of the blood vessels and increasing the circulation of the area.

Proper pre-operative medication should be given in the form of morphine sulfate and atropine or scopolamine. Much depends on these drugs to allay the apprehension of the patient and restore bowel tone. If the patient has distention or has been vomiting it is best to institute Wangensteen continuous suction before starting the operation.

Anesthesia. — Spinal anesthesia is the anesthesia of choice when indicated; however, cyclopropane, gas, and local anesthesia supplemented with sodium pentothal may be used. Much depends on the condition of the patient and the experience of the anesthetist. Careful consultation on the choice of anesthetic agent to be used should be had before surgical procedure is considered.

Incision. — The McBurney incision seems to be the choice of most of the authors. It is felt that it causes the least amount of trauma to the abdominal contents and gives adequate exposure. Bower⁶, however, feels that the McBurney incision is inadequate and recommends the use of the transverse incision. Lahey³⁰ urges the use of the long rectus incision with proper walling off of the abdominal contents for satisfactory exposure. He believes this should be done before attempting to locate the pathological appendix.

Operative Treatment. — After the proper exposure of the area has been made suction should be used to keep the field clear and to avoid the use of sponges, which have a traumatizing effect on the tissue. Gentleness in the handling of the abdominal contents should be a watchword for all who do surgery in order to lessen the devitalization of tissue and to make convalescence more comfortable.

If a well localized abscess is found no attempt should be made to disturb it, but an extraperitoneal drainage should be done over the abscess. If the appendix can be easily removed this should be done after evacuation of the pus by suction. However, if the cecum is involved, drainage of the abscess is the better choice, removing the appendix at a later date. Some men believe that the appendix should be removed in all cases but the majority feel that the conservative treatment tends toward a lowering of the mortality rate.

The meso-appendix should be ligated in sections rather than in one large mass. The procedure is safer because the ligating material may cut through the blood supply when ligated in one large section and may cause bleeding that may be difficult to control.

All are agreed that the appendix should not be crushed at the point of ligature. The stump should be treated with cauterization by phenol, iodine or electrocautery. Inversion of the stump with a purse-string suture still is a controversial issue. The method of choice in treating the stump by inversion or simple ligation with a non-absorbable ligature rests with the experience of the operating surgeon. The procedure which gives the best results should be his method of choice. When inversion is not done, the ileocecal pad should be brought over the stump or the meso-appendix can be brought over it if kinking of the ileocecal area does not result.

In the presence of generalized or local peritonitis the application of sulfonamides to the abdominal cavity has many advocates with excellent statistics to further their claim. However, there are those who oppose the use of these drugs in the peritoneal cavity with just as convincing statistics to prove the pitfalls in their use. The subject is still controversial and more observations will have to be made to settle the question.

Drainage is still an outstanding issue in cases of general and local peritonitis. Lahey³⁰ feels that when in doubt drain, placing the drain

down to the right gutter of the abdominal cavity and leaving it there for seven days. Meyers³⁴ feels that no drainage should be instituted in the abdominal cavity, but when the wound is markedly contaminated a drain should be placed in the wound only. There are advocates of both procedures in the articles reviewed, all with good results to support their use or non-use of abdominal drainage.

Postoperative Treatment. — In acute appendicitis, uncomplicated by local or general peritonitis or abscess formation, the postoperative treatment is important but relatively not difficult.

The complicated case presents a most serious problem to the surgeon in restoring his patient to normal health. Wangenstein drainage should be instituted immediately to place the gastrointestinal tract at basal rest and avoid distention until normal peristalsis has returned, avoiding the use of such drugs as prostigmin and pitresin to induce abnormal bowel action.

Proper sedation is necessary to keep the patient comfortable and avoid apprehension, at the same time restoring bowel tone. Morphine sulfate is the drug of choice.

The importance of protecting the fluid and electrolytic balance cannot be stressed too strongly. Normal saline, glucose and Ringer's solution should be used judiciously, remembering to give only a limited quantity of normal saline. The body needs only five to six grams of sodium chloride daily, 1000 c. c. of normal saline contains nine grams of sodium chloride. Nitrogen balance can be maintained by the use of protein hydrolysate intravenously. Vitamin B complex, vitamin C and vitamin K are necessary to the well being of the surgical patient. Whole blood should be given to all who need it as it is the fluid of prime importance in restoring the body tissues to a normal level. Oxygen should be used whenever needed.

The use of penicillin and the sulfonamides has helped to combat infection and lower the mortality, but they should be used judiciously.

Enemas and purgatives should be avoided until in all cases, both complicated and non-complicated, normal peristalsis has returned. Most surgeons agree that when this normal function of the gastro-intestinal tract returns, only a low saline enema should be used.

Early ambulation can be instituted in uncomplicated cases but sound judgment should be used in all complicated cases.

SUMMARY

1. The mortality and morbidity rates from acute appendicitis is too high for the modern standards of surgery.
 2. Early diagnosis and avoidance of cathartics will do much to reduce this high rate.
 3. Proper pre-operative treatment of all cases with careful surgical treatment is stressed.
 4. Electrolytic and fluid balances should be restored and free use of whole blood when indicated.
 5. Judicious use of penicillin and sulfonamides is urged and the avoidance of peristaltic stimulants, with the use of Wangenstein drainage of the gastro-intestinal tract to keep it at rest and avoid distention.
- 7627 Lake Street

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Forty-Two Cases of Poliomyelitis In Centralia, 1949

Herbert J. Levine, M.D.
Centralia

Forty-two cases of poliomyelitis were diagnosed and confirmed in private practice in a five week period in Centralia, Illinois. The period dates from July 3, 1949, to August 6, 1949. Five cases of hysteria in adults were also observed. The ages of the series of cases ranged from 3½ months to 28 years.

The diagnosis was based on history, symptomatology, and spinal fluid findings. There was one failure to obtain spinal fluid in an 18 year-old white female who presented clinical symptoms of polio. One male child, 3 years of age, who had spinal fluid findings of polio also had an associated pneumonia and nephritis. An-

other male child, aged 3 years, who had positive spinal fluid findings, expired from a toxic Encephalitis. The majority of these cases were not followed up after they had been transferred to polio centers in other sections of the state.

A larger number of adults developed polio than in previous epidemics in this area. The total number of adults were 5 females and 4 males with ages ranging from 18 to 28 years. There were no Negro patients. As in the 1946 epidemic and up to August 7, 1949, there were no cases of polio reported among the Negro population of Centralia. In 1946 Marion County had 64 cases reported for the year. In 1949, from July 3 to August 7, the total was approximately 87 cases—all of which were confirmed.

The following cases are cited, because, in the writer's opinion, sudden nervousness and irritability (mild or severe) associated with fever of unexplained origin, should not be neglected; especially, if polio has been reported in the area. All cases in this series which include pre-paralytic, paralytic, and bulbar polio exhibited some degree of nervousness and irritability.

Case I:

B. T., female child aged 5 years, was seen and diagnosed as bulbar polio. The child had been ill 6 days with fever, headache, vomiting, diarrhea, muscular twitching, and irritability. Spinal fluid revealed: cells 250; lymphocytes 90; globulin 2+; total protein 56 mgms. The child expired within 24 hours after being transferred to a polio center. The mother was asked why she hadn't taken the child to a physician earlier. The answer given was: "I thought my girl had worms."

Case II:

F. B., an 18 year-old white male, was examined in the office about 4 p. m., July 27, 1949. His chief complaints were: "Sudden fever (102.4 degrees), and mild frontal headache." Complete physical and neurological examination did not reveal any of the symptoms of polio. He was examined approximately 20 hours later and again there was no clinical evidence of polio. He was transferred to St. Mary's Hospital in Centralia for further observation and study. A complete blood count was immediately made and the results were as follows: R. B. C. 4,930,000. Hb. 91%. W. B. C. 14,000. Polys 86% S tabs. Lymphocytes 14. Because of the fever, vomiting,

and the white blood count surgical consultation was requested. Before the surgical consultant arrived to examine the patient, it was noted that the patient had developed sudden nervousness and irritability and a look of apprehensiveness. A Lumbar puncture was immediately made and the spinal fluid revealed 128 cells; polys 11; Lymphocytes 89; Total protein 60 mgms; globulin 1+.

The patient was transferred immediately to the Centralia Emergency Polio Center.* Within 10 hours after admission he had developed complete paralysis of the throat. He was unable to talk or swallow food or liquids. Diagnosis was bulbar polio.

Case III:

M. C., a white female aged 24 years, complained of fever and low backache for a period of 6 days. These were the only complaints. The patient was observed every day until the 6th day when it was noted that she had developed sudden nervousness and was very irritable when questioned. Her temperature ranged from 99 degrees to 99.6 degrees. As soon as nervous and irritable symptoms appeared, a lumbar puncture was performed and the spinal fluid revealed cells 27; lymphocytes 27; globulin trace; total protein 31 mgms. She was transferred as a pre-paralytic to polio center where the diagnosis was confirmed.

Case IV:

W. S., 18 year old, white male, was drinking a cup of coffee in a restaurant on August 2 when he suddenly developed paralysis of the right upper and lower extremity. He was examined in the office about 30 minutes later after the paralysis had developed. He gave a history of having had a slight frontal headache and fever the previous night. In order to rule out hysteria a lumbar puncture was made and the spinal fluid revealed cells 2; lymphocytes 2; globulin 1+; Total protein 52 mgms. Diagnosis was confirmed at polio center.

Case V:

A 5 year-old white female who had a history of fever (104.4 degrees), vomiting, and diarrhea

*The Centralia Emergency Polio Center was set up in the former Kenny Clinic in Centralia, Illinois, by Dr. Leonard Schuman, Chief of Contagious Diseases, and by Dr. Norman Rose, District Health Officer, under the able leadership of Dr. Roland Cross, Director of Public Health for the State of Illinois; Dr. Herbert Kobes of the Division of Crippled Children; Officials from the National Foundation for Infantile Paralysis, and Dr. G. N. Welch, Health Officer for the City of Centralia.

for two days. On examination she had marked faucial reddening and the tentative diagnosis made was follicular tonsillitis. She was kept under observation for 36 hours. It was then noted the child had developed muscular twitching and jerking and was quite irritable. She was referred to the Centralia Emergency Polio Center for further observation as a polio suspect. Diagnosis at the Center after lumbar puncture had been made was poliomyelitis, abortive stage with associated follicular tonsillitis.

Other observations noted are as follows: 11 cases gave a history of having had a sore throat 7 to 14 days prior to diagnosis of polio. 5 cases had non-purulent otitis media. 12 cases had evidence of chigger bites over the body and lower extremities. 8 cases revealed evidence of mosquito bites.

All patients in this series presented two or more of the following symptoms: fever, pain, headache, muscle tenderness, generalized weakness, stiffness of the back or neck, muscular twitching and jerking, nervousness, irritability, apprehension, and aching in the arms or legs.

Older children and adults complained of pain in the back of the neck and at times over the low-

er spine when the head was moved forward on the chest. These patients offered definite resistance to complete flexion.

CONCLUSION

During an epidemic of poliomyelitis one should:

1. Treat all acutely ill patients as suspects until a definite diagnosis is made.
2. Do a lumbar puncture when the slightest degree of neck rigidity is found.
3. Give careful consideration to any involvement of the nervous system during an acute infection.
4. Treat all individuals with fever as polio suspects until proven otherwise.
5. Examine all patients from head to foot.
6. Suspect sudden tremors of the hands as an important sign of polio.
7. Perform diagnostic lumbar punctures when in doubt.
8. Depend on clinical symptomatology as well as spinal fluid findings in making a diagnosis. There will be times when clinical findings will be the only basis for diagnosis of poliomyelitis.

The Battle for Survival

Mr. Clem Whitaker

I never face an audience of doctors...and medical representatives...without a deep sense of humility and a sharpened awareness of responsibility.

Perhaps because I am a Baptist minister's son, I have a strong feeling that all of us, if we are to justify our time on earth, should contribute, in some small way, to making the world a better place than we found it.

The medical profession certainly does that!

A good doctor, who lives up to the high ideals of his profession, leaves a lasting imprint on his community...and leaves it better in body and spirit than he found it.

I say this in preface because Miss Baxter and I want you to know that we have great pride in representing you...and we think you're pretty wonderful people, despite what President Truman and Oscar Ewing say about you.

If the day ever comes in America when the medical profession has to bow to the dictates of politicians, we believe it will be a tragedy for the American people. But that day need not come, if we are alert to our responsibilities, and that is the reason American medicine is girding for war!

Just a week ago, Miss Baxter and I had the privilege of hearing a brief talk by a young British doctor, who tried to practice under the new British Compulsory Health Insurance Sys-

Given at the Annual Meeting, Illinois State Medical Society, Chicago, May 16, 1949.

tem—and who finally decided that he could not, in good conscience, continue.

He is here now, in this country. He has renounced his British citizenship. He has taken out his first papers as an American citizen..and he is preparing to enter practice in our home State of California.

As I listened to this young man speak, knowing something of his past history..knowing the wrench that it must have been to forsake his friends and the country of his birth..I was deeply impressed with the unspoken story of heart-ache and tragedy which lay in the background.

For this young doctor was a veteran of the Royal Air Force. He was one of the young men of whom Winston Churchill said: "Never in history have so many owed so much to so few!" He had fought for more than four years, in the skies over Britain, for the defense of his homeland. And then he had flown over Europe, in the closing days of the war, to defeat his country's enemies and restore peace to his world.

But in private life, he was a doctor! He came home at 33, to find the socializers on the march in his own country..to find the way of life he had fought for seriously impaired.

He bought a medical practice, as doctors do in Britain, for \$12,000..and borrowed \$11,000 of the purchase price at the bank. He still owed most of that \$11,000 when the Government suddenly announced that on a given day he must join the British Compulsory Health Insurance System, or his practice would be *valueless*!

The socializers say there's no compulsion in compulsory medicine.

You should hear this young man's testimony. Congress, I am happy to tell you, will hear it!

He had a wife and children. He knew only one way of earning a living. He was a doctor. And he owed the bank \$11,000 for a medical practice which would be valueless if he didn't join up. So he pushed his convictions aside and he joined the Government system..and he tried desperately to make a go of it.

At the end of three months, as he relates it, he resigned..and boarded a ship for America. Why? Because he couldn't stomach it. Because he must either neglect his patients..rushing them through without either proper diagnosis or adequate treatment..or take fewer patients than would provide a decent living for his own family.

So with hurt in his heart, he abandoned the country for which he had fought..and came to our country, not just to protect his family, but because he knows the battle for liberty, if it is won, must be won here..in our America!

I hope with all my heart, as all of you do, that that young man's experience won't be repeated here.

It is our job..the job of everyone in this room..the job of everyone who believes in sound medical practice..to see that this doesn't happen here.

Now let's get down to cases. Let's look at our own country. Let's try to determine whether this *could* happen here!

In our country, Compulsory Health Insurance has not yet been enacted; the people have many misgivings about this revolutionary system; yet, the would-be commissars of the new medical hierarchy already are laying down the law, when there is no law, and are threatening economic reprisals against all who fail to comply with the law..even before it is enacted.

Let's be specific.

Here in Chicago, in this very hotel, John L. Thurston, assistant administrator of the Federal Security Administration, told the Tri-State Hospital Association less than two weeks ago that the hospitals either must go along with the Federal Government's program, or expect to be taken over.

There was no equivocation in what Mr. Thurston said.

He wielded a political club..and said, in effect: "Knuckle under, or we'll take you over!"

The British hospitals, he said, had been taken over by the Government because they opposed socialization, and then he added (this is an exact quotation):

"I realize it probably is wholly unnecessary for me, at this point, to belabor the obvious moral."

That, no one needs to remind us, is a defy!

Congress hasn't even acted on this proposal; no hearings even have been held—yet the bureaucrats in Washington already are wielding the big stick of Governmental authority and threatening to crack down on those who don't knuckle under.

These are the men who are determined to dominate American medicine. These are the

men who want to control the health of the American people.

I think it's about time we told off these petty bureaucrats who have forgotten that they owe their allegiance to the people of America who pay them their salaries.

I think it is high time we called a halt to their peremptory attempts to rule rather than serve.

You may not know Mr. Thurston. I don't know Mr. Thurston. But he works for us. We pay his salary..and his expenses..even when he travels around the country to propagandize against us.

How long are we going to tolerate that condition in Washington..and even more important, how long are we going to permit these little Caesars to run around the country and threaten the American people?

The time has come for a showdown..and the doctors of America should force that showdown..before it is too late.

If you wonder what political restrictions will be placed on your practice under political medicine, you don't need to wonder any longer. Mr. Thurston, who is reputed to be "the brains" of Mr. Ewing's Department, already has outlined the pattern. Either you join up, and supinely surrender, or the Government will take you over! That's what he told the hospitals..and that's what he has in store for the doctors.

Let's not delude ourselves about the ultimate outcome of this battle.

No Socialist State ever is satisfied with half-way measures. If Government Medicine comes to America, it will mean complete subjugation of American doctors..and their patients..to political overlords in Washington.

It will not only mean the end of the private practice of medicine; it will mean the beginning of the end of a free America.

In Britain, they began with Compulsory Health Insurance, on a modified scale, back in 1911. Since then, the cancer has grown. It has eaten up the Bank of England, the Cable and Wireless services, civil aviation, the coal industry, the transportation industry, the electric industry..and more recently the gas industry. The attempt to grab the steel industry is now under way.

Is that the pattern we want in America?

I don't think so . . . and I don't think, for a moment, that the American people will stand for it, once they know the true issue.

The Voluntary Way is the American Way--and the American people instinctively know that.

My partner, Miss Baxter, just has issued a new pamphlet under that title—"The Voluntary Way Is The American Way".

Soon millions of Americans will know that theme—and within another year there won't be any State in the United States without a vigorous promotion campaign for Voluntary Health Insurance.

American medicine isn't going to be content to beat a bill.

American medicine is going to resolve a problem.

We are going to give the American people health insurance—*real* health insurance—the American Way!

All over this land, doctors are learning to practice on the body politic—and are becoming very proficient in the art of political persuasion. We have the evidence of their work in our files—and every day brings a new deluge of letters, not just from the officers of Medical Societies, but from rank and file doctors everywhere who have enlisted in the fight to save their profession.

Perhaps you still wonder about the doctors who seldom attend their Medical Society meetings; about the doctors who are so completely absorbed in their practice and their academic and scientific pursuits—you wonder whether they will respond, now that the decisive battle is nearing.

We can give you some first-hand evidence on that score.

There are still thousands of doctors who apparently don't know their house is on fire, but every day a few more smell the smoke—and a few more join the fire department!

We are hearing from them at the rate of about 3,000 letters a week and we have no way of knowing, of course, how many thousands of letters, phone calls and personal enlistments are being received in county and State Medical Societies.

But let me give you a few clues as to how medicine is responding, even at this early stage of the campaign—and the magnitude of a Nationwide campaign, of course, means that it takes longer to get the wheels in motion.

Orders for the new poster of the Fildes painting, "The Doctor"—captioned "Keep Politics Out Of This Picture"—which is to be displayed in doctors' offices, as the keynote of our campaign, are rolling in at the rate of about 1,000 a day. And we are now filling the orders for this poster on the same day they are received.

Our objective is to have 50,000 of these posters actually up, on display in doctors' offices, within the next 60 days. If that goal is achieved, we will know that at least 50,000 doctors in America have joined the crusade to keep American medicine free—and you may be sure that President Truman and the members of Congress will know it, too!

But if we are really determined to build an impregnable defense against socialization; if we really want to command new respect for the medical profession in the halls of Congress and throughout the Nation, we can't stop when we achieve that objective.

Eventually—it may take six months, or even a year, to achieve this goal—we need 100,000 doctors' offices in America displaying the Fildes poster.

That means we need help from all of you—and all other leaders in medicine—in lighting the crusading fires.

To the men of medicine, this poster should become *a symbol of enlistment*—a notice to their profession and their patients that they have taken their stand against political medicine!

When that poster is on display, it should mean that no patient ever will leave that office before the doctor has taken a minute or two of his time to tell the story of Compulsory Health Insurance—and the disastrous results it would bring, if enacted in this country.

It should mean, too, that every patient who needs Voluntary Health Insurance will be encouraged by the doctor to get the type of coverage that best suits his requirements.

Because the poster will quicken interest of the people waiting in the doctor's reception room, Baxter has written a special pamphlet, with a miniature reproduction of the Fildes painting on the cover, which is now in distribution. It is a brief, popular treatment of the subject, which can be read on the run—and *two million copies* will be available for shipment to State and county Medical Societies within the next ten

days. This pamphlet, which also can be used as a letter-enclosure, is designed especially for use in doctors' offices.

You may think, as you listen to these plans, that we want every doctor to become a campaigner—and every doctor's office to function as part of a Nation-wide pamphlet distribution system. Let's be frank: That's exactly what we want—and that's what your campaign desperately needs!

This isn't just another skirmish in the fight against socialization.

This is the decisive battle that will determine the fate of American medicine for generations to come.

Within just a few days, the Congressional hearings open in Washington—and once they have started, there will be no letup in this fight until one side or the other has been decisively defeated.

The next two or three years will determine whether you are to remain in the private practice of medicine. *And if the decision once goes against medicine, there will be no turning back; there will be only a tightening of the lockstep you walk in!*

Your professional life is at stake! The health of America is at stake!

Our liberty—and everything we count important—is in jeopardy!

This isn't just a battle to save medicine. This is the most crucial battle that will be fought in our lifetimes—to save America, to turn back the tide of Socialism and despotism before it is too late.

This is an emergency—and we are calling all doctors!

It is without doubt the greatest emergency any of you ever have confronted in all your years of practice.

Not just one life hangs in the balance, but the life of a Nation is in your hands—a Nation that has become the last hope of all the liberty-loving people of the world.

Is it then too much to ask that every doctor become a campaigner?

There isn't a man or woman in medicine worthy of the high ideals of your profession who wouldn't respond to an emergency call if the life of a person, or a family, or a community was in danger.

But this emergency is so vast that it is hard to grasp.

If it is even hard to arouse many of the doctors of America, think how much harder it is going to be to arouse all the people of this country to the full implications of this struggle.

This truth we know—and this truth we must some way make America know:

When medicine is socialized; when doctors and their patients are regimented, the beginning of the end is in sight. It is one of the final, irreparable steps toward complete State Socialism. And at the end of that road is human degradation and misery . . . loss of incentive, loss of human dignity, loss of everything that means most to free men.

There are many men who will call us extremists when we make such statements—when we rip through the pages of obscure text in the Truman program and reveal the real intent of the act. They are cousins of the same men who saw no danger in Compulsory Health Insurance when it was first adopted in Great Britain. And today Britain is plunging headlong toward a regimented society that will blot out every vestige of liberty for the British people, unless the tide is turned back.

Perhaps some of your doctor friends, when you tell them about this—if they are impressed with the gravity of the issue—will exclaim: “What is A. M. A. doing about this?” “What is our National campaign headquarters doing?” “What happened to our \$25?”

We want to answer those questions frankly, because every doctor has a right to know.

First, let us make one emphatic statement for the record, because A. M. A. needs your confidence and your aggressive support—and you need a militant, fighting A. M. A. leading this battle:

A. M. A. may have had many shortcomings in the past. It may still have some . . . because any great organization usually has. But the new A. M. A. that is leading this battle is a heads-up, fighting organization that will gladden your hearts. It has found that it can step militantly into this greatest public issue of our time, without sacrificing an iota of its dignity—or of its significance as a great scientific institution.

The Board of Trustees and the Coordinating Committee of A. M. A. to whom we look for authority in the management of the campaign, have backed us up every step of the way, even on

difficult policy decisions which might bring down criticism on all of us. Dr. Elmer L. Henderson, Chairman of the Coordinating Committee in charge of the campaign, is a grand soldier, with a fighting heart and a tireless devotion to his job. And Dr. Lull, the A. M. A.’s General Manager, whom most of you know, is as fine a General today as he was when he wore Uncle Sam’s uniform.

We hope with all our hearts that out of this fight will come a strong, united medical profession, with confidence and pride in its leadership.

If, by this statement, I have given the impression that all is sweetness and light in National Headquarters—and that every day dawns brightly—I want to correct that impression immediately.

Since the first day we arrived in Chicago it seems there has been a crisis every hour, on the hour—with minor revolts and disruptions sandwiched in between. We never dreamed there could be so many internal problems in internal medicine! But some of the biggest disruptions and problems, which threatened the success of the campaign, have been entirely cleared away—and other serious problems are slowly yielding to treatment.

More than anything else, it is imperative that we have a united front—and that is one of the objectives toward which we have been working, with the warm-hearted backing of A. M. A.’s policy-making boards.

One policy that is firmly established is this:

There are going to be no punches pulled in this battle. If you read Dr. Henderson’s reply to President Truman, you will know what I mean.

American medicine has been a whipping-boy for political demagogues far too long—and this fight can’t be won by policies of compromise or appeasement. A few doctors thought we were too tough with the President, but most of the mail, I am glad to report, indicated that the doctors liked the militancy of Dr. Henderson’s statement.

Already a shift has quietly started in this campaign—and medicine is gradually emerging from a defensive position. That shift won’t be accomplished overnight, because the advocates of socialization, with The White House and the Federal Security Administration as sounding

boards for their propaganda, have powerful facilities to reach the people. But before this year is out, I think you will find a great change in public sentiment.

All of us in National Headquarters, since the campaign began, have been doing our utmost to broaden the front—and win new allies for medicine. That work is starting to pay dividends. The action of the General Federation of Women's Clubs in going on record against Compulsory Health Insurance was a stunning defeat for President Truman and Oscar Ewing. They had sent a staff of Government department heads and workers to the Convention, hoping to forestall our drive for Federation action in support of medicine's cause. Even Mrs. Roosevelt and Senator Pepper showed up at the Convention, but when the votes were counted only three of the 2,000 delegates supported the Truman program. That is a dramatic demonstration of the clear thinking of foremost women in this country. It is demonstration, too, of the power of doctors—and doctors' wives—when they really go to work . . . and it should give all of us increased confidence.

Only a few days ago another powerful organization . . . the National Fraternal Congress of America, representing several hundred of the strongest lodges and fraternal orders in the Nation . . . also took its stand beside the medical profession and went on record against Compulsory Health Insurance.

The American Farm Bureau Federation, the National Grange, the American Legion, the American Bar Association—and scores of other powerful organizations—have come into the fight against socialization . . . so that medicine need not stand alone.

In the past 10 days, the list of organizations supporting medicine's position—in the country at large—has jumped from 178 to 518. The organization drive in the States and counties has rolled into high gear in most sections of the country, and we have as our objective here, too: By the end of the year, we hope there will be at least 5,000 organizations in America on record against Compulsory Health Insurance—and in favor of Voluntary Health Insurance.

Likewise the educational work with some of the powerful *National magazines* and newspapers, which had previously been unsettled in their position on this issue, has started to bring results.

We're getting some barbs along with the editorial endorsements of medicine's position, but we *are* making progress—and overcoming misunderstanding and ill will of long standing.

When the chips are down, and the critical roll-calls come on this issue, I think you will find that medicine will have staunch support.

Now what about that \$25? What's that going into? Thus far our expenditures have been comparatively modest, but our staff has been built and trained now, the presses are running, with orders that total millions of pieces, and costs are mounting!

If all goes well, we will issue and distribute *100 million pamphlets* during the next twelve months—probably the heaviest pamphlet barrage ever laid down in America, except during a presidential campaign.

That costs money. It takes a lot of \$25 contributions to buy a million pamphlets—and nothing we issue is in quantities of less than a million. That's a minimum order when you are splitting the shipment between 48 States—and most of our mass-mailing pieces will run into many millions of copies.

Our opponents have criticized us for having too much money. But they would *pity* us if we didn't have the money! In a fight like this, no matter what we do, there'll be lots of bitter criticism. That's part of the breakage in a battle for survival—and this is that kind of battle.

No matter what this campaign costs in money, it will cost much more in time and energy—and in tireless work by doctors and thousands of others all over the country.

The \$25 a doctor gives, in most instances, will be the smallest part of his contribution. The time he gives away from his practice; the evenings he spends away from his family, addressing opinion for his profession—these will all be costly contributions.

But no matter what the cost, in money, in energy, in frustrations and irritations, and even in damage to health, the cost will still be just a fraction of the terrific price we would pay if this fight were lost.

We have fought two world wars in defense of our liberty, so we have no illusions about the cost of freedom.

The *price* of liberty comes high—but the *loss* of liberty; that's a price none of us can afford to pay.

Let us give you this strong, personal assurance:

This fight *can* be won—it *must* be won! And it *will* be won!

And in the winning of it, all of you—and all of the other doctors, throughout America, who get into the battle—will contribute to the well-being of this Nation in greater measure than you ever have had opportunity to do before.

This is the greatest challenge any of us ever has confronted. With socialization running rampant all over the world, *we* have been given the task of reversing that trend. That's the stupendous responsibility—and the wonderful opportunity—which has been given the doctors of America. It is an opportunity to change the course of history. . .to defend our good way of life, and to leave a priceless inheritance to generations yet unborn. American medicine, I am confident, will be equal to the job!

Studies on a New Pyrogen Fever Treatment

**Werner Lonsen, M.D. and
Erich Liebert, M.D.
Elgin**

Since the introduction of fever therapy in the treatment of general paresis by Wagner von Jauregg artificially produced fever has been recognized as a standard treatment in state hospitals. Because of the hazards connected with malaria inoculation various attempts have been made to induce fever by other methods to minimize undesirable side reactions and the severe exhaustion in already physically and mentally debilitated patients. Rat bite fever, cabinet heat, and particularly typhoid vaccine have gained wide acceptance as substitutes.

About 1½ years ago the Chemical Department of the Northwestern University Medical School Laboratory called our attention to a new form of pyrogen which had been developed by Dr. Ginger and Dr. Riegel. It is a substance free of protein and free of micro-organism which has the ability to produce a temporary elevation of temperature in animals without any undesirable side reactions. Microscopic examinations of

organs of animals sacrificed after a long course of fever treatment or after extremely large doses of this material had been injected did not show any signs of permanent damage. After the drug had been sufficiently tried out in animal work we thought it safe to use it in the treatment of general paretic patients admitted to the Elgin State Hospital. The fact that it seemed to produce constant and reliable fever reactions even when only a very small amount of this material was administered — only a few micrograms are necessary — and since no toxic material was present in this substance we thought that such a drug would be of value in the treatment of general paresis, and would have definite advantages over other forms of fever treatment if the results would compare favorably with those obtained with malaria and typhoid vaccine.

This pyrogen now is manufactured under the name of Pyromen and was furnished us by the Chemical Laboratory of the Northwestern University. We want to thank Dr. Riegel and Dr. Ginger for their interest and collaboration in this study.

We subjected an unselected group of 48 neurosyphilitic patients, men and women, white and

From the Elgin State Hospital, Elgin, Illinois.

Presented before the Physicians Association, Department of Public Welfare, State of Illinois, 108th annual meeting, Illinois State Medical Society, Chicago, May 10-12, 1948.

colored, between the ages of 25 and 65, to a course of Pyromen fever treatment. Such a course involved usually 30 fever hours over 103°. In twenty-nine of these forty-eight patients no other form of fever treatment was given while nineteen received typhoid and Pyromen fever treatment combined in order to compare the reactions to typhoid and Pyromen in the same patients. In most patients a satisfactory fever reaction could be obtained ranging from 103° to 105° and even higher. A few of the patients did not respond satisfactorily with a high elevation of temperature. It was interesting to note that the same patients also did not get a satisfactory fever reaction with large doses of typhoid vaccine. Sometimes a single dose did not always keep the temperature elevated over a sufficiently long period of time and since a temperature rise of about 103° for 4 hours a day is generally desired a divided dose treatment was instituted. Our present regime is as follows: At 9:00 A.M. the patient receives 1 cc. of Pyromen intravenously containing 50 micrograms of the drug per cc. Twenty minutes later a second dose of 2 cc. is given. The second dose is usually increased each time by 1 cc., keeping the initial dose constant at 1 cc. The patient received this treatment 3 times weekly. With this regime we hardly had any failure and the fever obtained in most cases was sufficient. Forty-five minutes following the second injection the patient has a severe chill which lasts about 20 to 30 minutes, the temperature rises rapidly. The rise is uniform and the fever extends on the average of three to four hours, but sometimes six to seven hours, of fever above 103° can be obtained. Only occasionally vomiting occurred as a side reaction and now and then the patient complained of headaches or mild aching in his limbs during the fever reaction.

The temperature could always be reduced to normal by the usual methods, for instance the administration of icebags, cold enemas, alcohol sponge, aspirin, etc.

The twenty-nine patients who received Pyromen alone had on the average ten injections, the others five to six injections. Three to five months after completion of the treatment the results shown in Table 1 were obtained.

An amelioration of the spinal fluid findings was striking in almost 70% of our cases and

TABLE 1
CLINICAL RESULTS AFTER TREATMENT
WITH PYROMEN

(Patients had between 21 to 36 fever hours)				
	Markedly Improved	Moderately Improved	Un-improved	Dis-charged
24 men	19	2	2	14
5 women	4	1		3
CLINICAL RESULTS AFTER TREATMENT WITH PYROMEN COMBINED WITH TYPHOID VACCINE				
	Markedly Improved	Moderately Improved	Un-improved	Dis-charged
15 men	5	6	4	5
4 women	3	1		3

compared favorably with the results obtained with malaria and typhoid fever vaccine. Table 2 shows the decrease in the spinal fluid protein and of the cell count about 2 to 3 months after the course.

Because of the fact that this material was used for the first time in humans special attention was paid to undesirable side reactions. During the fever reaction the pulse rate increased usually in proportion to the fever. The systolic blood pressure showed often a slight increase and the diastolic blood pressure decreased 10 to 15 mm.

TABLE 2

Name	Cell	Total Protein	
		mg%	Gold Curve
E.M.			
Before	22	45	5554321100
After	4	37.5	5321111000
V.C.			
Before	4	39.0	2211000000
After	3	34	2111100000
E.C.			
Before	6	59	5554321100
After	5	40	4432211000
B.D.			
Before	39	48	3332210000
After	12	44	3343111000
W.S.			
Before	15	51.5	5555432110
After	5	41.0	3432110000
F.M.			
Before	14	65	5555543211
After	4	41	4444321100
S.J.			
Before	11	57	5555543321
After	5	40	4444432100

TABLE 3
BLOOD COUNT CHANGES DURING PYROMEN TREATMENT

12/17/47	A.Y. W.B.C.	BASO	EOSINO	MYELOS	JUVENILE	STABS	SEG	LYMPHO	MONO
8:45 A.M.	8900					4	57	38	1
9:40 A.M.	6300		1			1	62	36	
10:10 A.M.	8300					5	72	23	
10:40 A.M.	8400		1			4	71	24	
11:10 A.M.	8100					6	73	21	
11:40 A.M.	6700					8	80	12	
12:10 P.M.	6800					9	80	11	
1:15 P.M.	14300					11	78	11	
2:00 P.M.	15700				1	18	77	4	
3:00 P.M.	21000					14	77	9	
4:00 P.M.	18000				2	17	75	6	
5:00 P.M.	12800				1	16	79	4	
6:00 P.M.	12100				1	14	76	9	
7:00 P.M.	13900				1	13	77	7	
8:00 P.M.	13600				1	11	78	10	
9:00 P.M.	18050				1	14	75	10	
10:00 P.M.	13800				1	18	73	8	
12:00	11100				1	11	78	10	
12/18/47									
2:00 A.M.	22000				2	14	77	7	
8:00 A.M.	28400				1	11	77	11	
10:00 A.M.	22400					12	69	9	
6:00 P.M.	26000			2	5	14	76	3	
12/19/47									
	9400					6	67	27	
12/17/47	J.S.								
8:45 A.M.	8400		1			2	51	39	1
9:40 A.M.	5500		1			2	57	40	
10:10 A.M.	8300					4	57	39	
10:40 A.M.	6700					5	78	17	
11:10 A.M.	7500					6	67	27	
12:10 P.M.	10300				1	8	82	9	
1:15 P.M.	15300				1	26	68	5	
1:45 P.M.	13500					14	79	7	
2:00 P.M.	15400					12	79	9	
4:00 P.M.	23000				2	12	78	8	
8:00 P.M.	26650				1	14	78	7	
9:00 P.M.	26400				1	12	75	11	
10:00 P.M.	23800			1	5	15	70	7	
12:00 P.M.	26400				1	14	74	11	
12/18/47									
2:00 A.M.	29400				2	12	78	8	
12/18/47	J.S.								
6:00 A.M.	30200					9	71	12	
10:00 A.M.	27600					8	74	11	
12:00 Noon	26400			1	4	19	67	9	
12/19/47									
	11600					3	67	30	

hg. The blood sugar, N.P.N., and calcium were not influenced in any marked degree and these values returned to the normal shortly after the fever reaction. No permanent kidney or liver damage was detected. The urine showed at times, as we see it in other forms of fever treatment, a trace of albumin, some hyaline casts, and in a few patients a few granular casts, but all these findings disappeared as soon as the treatment was completed.

Periodic blood counts were taken before treatment was started and in one half to one hour intervals thereafter. Table 3 gives some data regarding the changes observed.

The blood count revealed that very soon after the injection the number of white cells decreases and that the initial decrease is followed by a profound increase of leucocytes with a marked shift to the left. The number of lymphocytes decreases. The leucocytosis reaches its maximum at approximately ten to fourteen hours after the injection of the drug. The blood changes return gradually to pre-febrile levels within thirty to forty-eight hours.

In general we had the impression that Pyromen was safe in the treatment of general paretics, although we had one fatality which occurred ten days following the treatment. However, we thought that Pyromen was not responsible for the death.

The patient was a fifty-two year old man who entered the hospital in a very poor mental condition and was suffering from a cord bladder and when admitted already had a slightly increased N.P.N. (40.3). His very poor mental condition gave the indication for fever treatment. Very shortly after the first injection the patient developed a temperature of 103. The temperature remained high during the next few days. The N.P.N. in the blood rose to 260 and although the N.P.N. gradually decreased the patient expired ten days later. There are many reports in the literature describing the danger of fever therapy in patients suffering from cord bladder. In all these patients the fever response seemed to be exceptionally high.

CONCLUSIONS

Our conclusions are that Pyromen is a new drug which has the ability to produce fever artificially. This drug is not a protein. It is free from bacteria and is free from toxic material.

It effects safely a mobilization of the body defenses. This drug has proved its usefulness in the treatment of neurosyphilitic patients. The results compare favorably with those obtained with malaria and typhoid fever treatment. It has in our opinion the advantage over malaria insofar as it is less dangerous and less exhausting to the patient. In the method described above a good fever response can be expected in most of the patients and even colored patients respond well to this treatment. We also did not find any difficulties in giving it to patients over 60 years of age. Since Pyromen is not a protein, does not contain any toxic substances, and gives results with infinitesimal amounts it has to be considered as superior even to typhoid vaccine.

We recommend this form of therapy in the general use of fever treatment. In the way described above no undue hazards have occurred and the response as far as the improvement of the patient is concerned is as good as any other form of fever therapy.

DISCUSSION

Dr. L. G. Ginger, Evanston, Ill.: As a biochemist, it seems appropriate for me to begin the discussion of this paper with a few brief remarks about the chemistry of pyrogens and, in particular, about the drug PYROMEN, which was employed in this clinical study.

Dr. Lonsen has pointed out that crude typhoid vaccine has been used for years to elicit therapeutic fever. Recently, various investigators have published papers concerning the extraction and purification of the active factor, that is, the pyrogenic factor, from a number of strains of bacteria. Such preparations have seen very limited clinical usage. The methods of isolation employed by these investigators appear to have one thing in common, namely, the removal or destruction of protein. It is generally agreed that pyrogens are polysaccharides.

Thus, there appeared to be a very definite need for the preparation, in quantity, of a purified pyrogenic material to replace crude typhoid vaccine for the therapy of afflictions where hyperpyrexia is indicated. Dr. Byron Riegel and I embarked upon such a preparative program at Northwestern University's Chemistry Department at Evanston with the aid of a number of graduate students, in particular, Paul Anthony and Catherine Marx. This effort was made possible by financial support received from the Baxter Laboratories and by close scientific cooperation with Dr. N. M. Nesset of that organization. We worked principally with a *Pseudomonas* species. The methods described in the literature, in modified form, were used to isolate and purify the active pyrogenic factor, which we have called PYROMEN. We have found, in accord

with other investigators in this field, that this pyrogen is not a protein but some sort of polysaccharide. Studies are now in progress on the complex chemical structure of Pyromen, and we hope to be able to publish these studies very shortly.

The effectiveness of Pyromen in laboratory animals has been studied in detail by other groups. Physiologic findings, e.g., fever onset and duration, changes in the blood picture, etc., are quite similar to those just reported in humans by Dr. Lonsen. It is significant that the drug will elicit fever in the rabbit at the extremely low dosage of 0.1 microgram (that is, one-tenth millionth of a gram) per kilogram of body weight, whereas the LD₅₀ in mice is slightly over 8,000 micrograms per kilogram, showing a very wide margin of safety.

The therapeutic benefit derived from pyrogen induced fever is apparently attributable to two factors: 1) a bactericidal effect caused by the increase in body temperature, and 2) an accentuation of lytic phenomena associated with the profound leucocytosis which always follows the fever. This issue seems worthy of further study.

It has been particularly gratifying to have collaborated in this work with Dr. Lonsen. He is to be commended for their patience and perseverance in establishing the dosage and the method of administration of this new drug in the therapy of neurosyphilis.

Dr. Louis Olsman (Chicago State Hospital):

What is the effect of the drug on the red blood cells, late after the therapy has been completed, perhaps months after the therapy has been completed?

Secondly, what kind of a white count do you get weeks and months after your course of therapy has been completed? And Dr. Ginger, are these polysaccharides similar to the ones being used in the experimental tumors and malignancies, or is not that a fair question?

Dr. L. G. Ginger, Evanston, Ill.: Concerning the use of bacterial polysaccharides, I assume you have reference to Shear's work. His preparation will elicit fever in experimental animals but it is quite toxic. I suppose the fundamental question involved is: are all bacterial pyrogens the same? I am afraid there is no data on that. I would say no.

One of the things we hope to do in the near future, once we have completed our methods for purifying the pyrogen from the bacterial source we are now studying, is to extend that work and include all sorts of bacteria. That is in the future.

Dr. Lonsen: Blood counts which were taken about three months after completion of treatment didn't show any change in the red blood count and the white count, the number of white cells was always normal, or at least it didn't show any change in comparison to the picture which the patient showed before the treatment was started.

TEACHING THE "SOUTHPAW"

Many apparently left-handed primary grade children may be successfully taught to write with the right hand. When writing begins they should all be so taught, because the use of the right hand fits in better with the left-to-right direction of writing and also because it conforms to the custom of the majority and hence is easier psychologically. If, however, a child objects strenuously or develops signs of nervous strain, of which stuttering may be one, the attempt should be abandoned at once, and he should be

allowed to use his left hand without criticism.

Those who are taught to write with the left hand should be shown the proper position of the paper, which is slanted with the top border to the right instead of to the left as is usual. It is often necessary to drill them in the use of this position, since otherwise they are likely to imitate their right-handed neighbors. They should also be allowed to write with a slight backhand slant if they so prefer.—*Excerpt, New England Journal of Medicine-240:7, Feb. 17, '49, Right or Left-Handedness: A Practical Problem, Richard S. Eustis, M.D. (Chesham, N. H.) P. 249.*

CASE REPORTS



Antenatal Thrombosis

**Manuel Weiss, M.D. and
Samuel J. Turner, M.D.,
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While thrombosis of the superficial veins occurs frequently in pregnancy, especially in women affected with varicosities, spontaneous antenatal thrombosis of the deep veins of the lower extremities is a rare complication. Westmann¹ states that the incidence of antenatal thrombosis is 0.1% in contrast to 5.0% for puerperal thrombosis.

We are herein reporting such a case history which in addition to its rarity, presented a difficult therapeutic problem.

J. B. (History No. 164023), 25 years old, married, white primigravida 30 weeks pregnant was admitted to the hospital on September 16, 1947 with complaints of pain in the left sacroiliac region radiating down the back of the thigh as far as the popliteal space. The temperature was 102°, blood pressure 110/70 and weight 143 pounds. Her pre-natal course was uneventful until two days prior to admission when the above pain occurred. This was associated with a feeling

of compression around the left thigh and exquisite tenderness along the course of the femoral vessels. Her past medical history revealed rheumatic fever at ten years of age and chronic left otitis media. There was no familial or personal history of diabetes, scarlet fever, kidney, nervous or mental disease. Menarche occurred at 13 years of age and her last regular menstrual period was January 25, 1947. The pre-natal record indicated that her physical condition prior to this development was excellent. The pelvic measurements were: interspinous 26 cm; intercrestal 29 cm.; intertrochanteric 34 cm.; external conjugate 20 cm.; transverse of the outlet 10.5 cm.; the conjugata vera was over 12 cm.

Laboratory examinations during the entire course of her pregnancy were essentially negative although her initial blood count showed a moderate anemia: RBC 3,720,000; WBC 8,250 HB. 73%. She had blood type IV-0, Rh factor positive and serology negative.

Physical examination at time of admission revealed a patient 7 months pregnant with a fetus

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of the size commensurate with the estimated state of gestation. The measurement of the left thigh was $1\frac{1}{2}$ inches larger in circumference than the right. The left thigh and leg showed increased warmth with cyanosis and mottling of the skin. There was no pitting edema. The most exquisite tenderness was along the course of the internal saphenous vein. Homan's sign was strongly positive. The tenderness of the left sacro-iliac joint was of moderate severity. Neurological examination was essentially negative. X-ray revealed no bony pathology. Diagnosis at this time was thrombosis of the internal saphenous and femoral veins.

Immediate anti-coagulant therapy was instituted. The patient received an initial dose of 300 mgms. of heparin in Pitkin menstruum, plus 200 mgms. of dicumerol. Coagulation and prothrombin index determinations were made daily. The dicumerol was continued until the patient's prothrombin index became 30% of normal. After ten days of the above therapy with no improvement of the subjective complaints or objective findings, surgical intervention was deemed necessary.

An exploration, under local anesthesia, of the left femoral vein in Hunter's canal was performed by Dr. J. T. Gault. Incision of the femoral sheath revealed extensive periphlebitis of the left superficial femoral vein which was intimately adherent to the femoral artery. A transverse incision over the anterior surface of this vein was made. No free bleeding ensued and several clots were expressed by digital pressure. Following this, a glass rod aspirator was used to suck out the remainder of clots both distal and proximal to the incision in the vein until free bleeding occurred. The vein was doubly ligated and severed and the wound closed in layers. The patient experienced relief almost immediately.

Dicumerol therapy was continued for eleven days after surgery. One week post-operatively the patient was allowed out of bed, experiencing only slight tenderness over the incision and a minimal amount of swelling. On 10-8-47, 22 days following admission and 12 days after operation, the patient was discharged in good condition. Fetal heart tones were 148 per minute and of good quality.

She was readmitted on 10-27-47 at term and in labor. After a 3 hour first stage and 20

minute second stage, a normal living male child weighing 7 pounds, was delivered spontaneously. The third stage of labor lasted 4 minutes and was uneventful. Cord blood was obtained for the determination of clotting and bleeding time and was found to be within normal limits. The baby then received 5 mgms. of vitamin K intramuscularly. Within 6 hours following the delivery the patient was ambulatory. She was discharged with her baby on November 2, 1947 — 6 days following delivery and in excellent condition.

DISCUSSION

Goldsborough² in 1904 reported one case which ended fatally and collected ten other cases from the literature. In 1937 Kahr³ reported four cases and referred to Holzmans' case in 1924 which succumbed to pulmonary embolism. Maxwell⁴ reported a single case in 1943 and Steiner⁵ in 1945 added another. With the exception of Stander⁶ no recent textbook of obstetrics makes any reference whatsoever to deep vein thrombosis complicating the prenatal period¹

The exact etiology is unknown. Brown, cited by Maxwell⁴ mentions varicose veins as a predisposing cause, while Bacon⁷ in 1903 postulated the theory that continued uterine contractions dislodged placental masses which formed rudimentary emboli or perhaps altered the blood composition. Westmann¹ states that women who incline to varicose veins, thrombosis and embolism, possess inferior cardiovascular systems, most probably as the result of endocrine deficiency. In his studies he found that fifty percent of cases with thrombophlebitis have a late menarche indicating hypofunction of the endocrine system. Veal and Hussey⁸ place the responsibility on such factors as the size and position of the uterus, the length and motility of the supporting ligaments, the size of the pelvis and the tone and development of the abdominal musculature. Steiner⁵ reported the successful employment of lumbar sympathetic block which in turn supports the concept of vasospasm as an etiologic factor. The condition known as primary idiopathic thrombophlebitis of the recurrent type was reviewed by Barker⁹ in 1936 at the Mayo Clinic.

The accompanying table includes seventeen cases of deep vein thrombosis as reported in the literature since 1900. A number of pertinent conclusions can be drawn: Age and parity play

Reported by	Age	Parity	Period of Gestation	Fever	Affected Part	Effect on Labor and Delivery	Etiology
Brindeau (10)	33	III	8th Month	0	Left femoral vein	None	Intercurrent infection
Bonnet							
Laborderie (11)	27	I	8th Month	0	Left internal saphenous	None	?
Beaudry (12)	28	II	7½ Month	?	Right internal saphenous	None	?
Bradford (13)	?	?	Term	?	Right leg and thigh	Incomplete account	?
Gripat (14)	32	VII	End of 3rd Month	0	Right femoral and left leg	Reported at 8th month — child still unborn	Anemia and albuminuria
Dickinson (15)	30	I	8th Month	?	Left leg and thigh	?	?
Audebert (16)	40	II	6½ Month	?	Left femoral vein	None	?
Saint-Ange (17)	?	?	1st Month	0	Left femoral vein	Miscarriage at five months	?
Commandeur (18)	?	III	5th Month	0	Right leg	None	?
Bacon (7)	23	I	8th Month	+	Left femoral vein	None	Placental mass theory
Goldsbrough (2)	29	I	Term	+	Left Common iliac	Operative delivery fatal	Pressure thrombosis
	34	III	7½ Month	?	Right leg	None	Intercurrent infection
Kahr (3)	38	V	3rd Month	?	Left leg	Premature Del'y	?
	45	II	6th Month	?	Left leg	None	?
	28	I	Term	?	Left leg	None	Old Rheumatic fever
Maxwell (4)	?	IV	7½ Month	0	Saphenous system — both thighs	None	?
Steiner (5)	36	I	3rd Month	0	Left lower extremity	None	Prolonged bed rest for threatened abortion stasis?

no significant role; the greatest frequency of this complication occurs during the last trimester; the left lower extremity is affected twice as often as the right; fever occurs rarely; pulmonary embolism may be a fatal complication; the effect on labor and delivery is minimal after the thrombosis is controlled.

SUMMARY AND CONCLUSIONS

The case presented had a thrombosis of the left femoral and left saphenous veins which occurred without any apparent cause during the seventh month of gestation. No relief was obtained from the use of anti-coagulants. The prothrombin index was maintained at 30% of normal for a period of 10 days. However, aspiration of the clots and ligation of the involved veins resulted in immediate disappearance of the subjective complaints. Anti-coagulant therapy was continued for 10 days post-operatively. The patient was discharged from the hospital in excellent condition 12 days after the ligation. Following the surgery for control of the thrombotic process, there was an uneventful delivery of a normal, living 7 pound male infant.

The use of heparin and dicumerol apparently caused no apparent injury to either the mother or the baby. It was the combination of vein ligation plus anti-coagulant therapy which gave the desired results.

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Acute Hydramnios

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Hydramnios, an excessive accumulation of amniotic fluid in pregnancy, may manifest itself as either a chronic or an acute disorder. Authorities do not agree as to the exact limit of the

normal amount, but in general consider any amount above two liters abnormal.

The incidence of chronic hydramnios has varied in the reports of different clinics, but the average seems to be about one in every two to three hundred pregnancies. Acute hydramnios is considered rare; it is estimated to occur once in 12,000 births.

Presented before the Clinical Meeting of the Chicago Gynecological Society at the Research and Educational Hospital, University of Illinois, February 20, 1948.

The etiology of hydramnios is obscure. Many causative factors have been suggested. In over fifty per cent of the cases hydramnios is associated with gross malformations of the fetus. Some of the etiological factors frequently listed are inflammations or infections of the amnion — Goodall believes this will explain the formation of hydramnios as well as the type of associated anomalies. Also suggested have been (1) increased renal activity with accumulation of fetal urine (although this is disputed by a number of authorities including Rivac, De Lee, etc.); (2) conditions obstructing venous circulation in the fetus; (3) twin pregnancies, particularly the uniovular variety; (4) maternal diseases, including cardiac or renal failure leading to edema of the placenta with increased transudation into the amniotic sac.

Our interest in the problem of hydramnios was intensified by the following case:

The patient was a 27 year old white woman, whose past medical and surgical histories were essentially negative. Her obstetrical history included an uneventful pregnancy and delivery of a nine and one-half pound male in 1943. This child died three years later of a lymphatic leukemia. In 1945, at two and one-half months the patient had a spontaneous abortion. On January 21, 1947, she was delivered by low forceps and episiotomy of a normal seven and one-half pound living female and had an uneventful puerperium. She returned in six weeks for her post-partum check-up, at which time all findings were essentially negative.

On June 3, 1947, the patient was first seen at the office with the story that following her delivery in January she had two normal menstrual periods, the last one occurring on March 15. At this time she had no other complaints. Pelvic examination disclosed a uterus the size of about two and one-half months' gestation. The remainder of the physical examination was essentially negative.

She made her second office visit five weeks later, at which time the fundus was found to be midway between the symphysis and umbilicus, consistent with a diagnosis of a seventeen week gestation. Fetal movements were perceptible.

Her next visit was on August 1, 1947, twenty weeks since the onset of her last menstrual period and three weeks since her last office visit. At

this time the uterus felt very tense, was enlarged far beyond the normal growth at this stage. The fundus measured over 32 cm. above the symphysis. The fetal heart tones could be obtained, although the sounds were barely audible. The patient who had weighed 137 pounds at her visit three weeks before, now weighed 144 pounds, but her blood pressure was normal and the urinalysis negative. She complained of tiring very readily and of slight dyspnea on exertion.

The patient was placed on a salt-free diet and asked to return in a week. She returned on August 19, three weeks later. At this time she complained of marked ankle edema and pronounced dyspnea. Her weight was now 153½ pounds, an increase of nine and one-half pounds in three weeks. Her blood pressure and urine were normal. The abdomen measured 103 cm. in circumference at the level of the umbilicus and gave the impression of a multiple pregnancy several months past term. No fetal parts could be outlined at this time nor were the fetal heart tones or movements perceptible. An x-ray of the abdomen was obtained the same day and the report read: "Marked, circumscribed increase in density of the abdomen and pelvis. Fetal skull noticed in the pelvis, age about four and one-half to five months."

In an effort to relieve the maternal distress it was debated whether the intra-uterine pressure should not be relieved by puncture of the amniotic sac through the abdominal wall, as advocated by Louis Rivett of London. But this procedure entails certain obvious difficulties and the possible danger of (1) carrying infection into the uterus, (2) of perforating the mother's intestine, (3) or opening a large blood vessel in the uterine wall with subsequent hemorrhage, or (4) that the placental attachment may be separated with serious bleeding. While Rivett minimizes these dangers he admits that the separation of the placenta has occurred in several of his cases, and that despite the transabdominal gradual withdrawal of liquor, a certain number of patients do go into labor and since, as he pointed out, "in most cases the excess of liquor will reaccumulate in three to four weeks and the whole procedure will have to be repeated again and again."

Because of these considerations it was decided to try the ammonium chloride management

which proved so uniformly successful in the hands of Abrams and Abrams, as reported by them in August 1946. In the two cases of hydramnios they report in detail, both cases were characterized by an excessively large uterus, tense abdomen and excessive gain in weight. Ammonium chloride, seven and one-half grain tablets, were prescribed and continued for a week. At the end of the week they reported that the excessive size of the abdomen was reduced, fluid output increased, weight decreased, and both pregnancies progressed normally and normal, healthy children were delivered.

Our patient was placed on four, seven and one-half grain, enteric coated tablets three times a day for eight days, i.e. 90 grains daily. At the end of a week the patient's weight had increased another two pounds and the circumference of the abdomen had increased from 103 cm. to 106 cm. The dyspnea was much more marked and she had to sit erect in bed in order to breathe. The ankle edema was 4+.

In view of the failure of the ammonium chloride therapy and in order to relieve the maternal distress, it was decided to rupture the membranes through the cervical canal.

The patient was admitted to the Henrotin hospital and on August 27, 1947, she was removed to the delivery room. Through a partially dilated cervix and with the aid of a dressing forceps the membranes were perforated. This led to a great gush of liquor amnion. The hand was used as a tampon in an effort to prevent the too sudden emptying of the uterus. After the initial gush was controlled we managed to collect the remainder of the fluid in a large basin, and the amount collected measured over ten liters. The patient expressed herself as feeling greatly relieved and was returned to her room in good condition.

Shortly thereafter she began to have slight to moderate amount of vaginal bleeding which persisted for several hours. Forty-nine hours after the rupture of the membranes the patient went into labor and one and one-half hours later she delivered spontaneously a stillborn male infant weighing 434 grams. This was followed promptly by a second male stillborn infant weighing 265 grams. The placenta was delivered four minutes later. It was a single placenta, with two cords, two amnions but only one chorion.

The blood loss was minimal, only about 100 cc. The patient was returned to her room in good condition. She had an uneventful puerperium, and on her fourth post-partum day she insisted on going home. Incidentally, autopsy failed to disclose any gross abnormalities in either infant.

We felt the report of this case might prove of interest not only because of the extreme rarity of an acute hydromnios occurring at twenty weeks of gestation, but also because it presents the problem of proper management, and illustrates the occasional limitations of x-ray examinations. It is generally accepted that while fetal bones have been shown as early as the twelfth week, it is not until about the twentieth week and thereafter that the fetal skeleton can be demonstrated with but few failures. Here is an instance of failure to demonstrate the presence of twins, due probably to the marked opacity of the liquor amnii. And also, contrary to the favorable results reported by Abrams with ammonium chloride therapy, in our case it proved wholly ineffective.

(Addendum: Since the report of this case before the Clinical Meeting of the Chicago Gynecological Society, this patient was delivered on September 14, 1948 at thirty-eight weeks of a normal female, weighing six pounds four ounces, after a perfectly uneventful pregnancy.)
30 N. Michigan Avenue

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The Coexistence of Pernicious Anemia and Chronic Lymphatic Leukemia.

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The simultaneous occurrence in the same individual of two relatively common blood dyscrasias, pernicious anemia and leukemia, is apparently very infrequent. In 1900, von Leube^{2,3} applied the name "leukanämie" to a combination of a severe macrocytic, hyperchromic anemia and a leukemoid white cell picture. This combination is no longer regarded as an entity by most hematologists^{4,5,11} since many leukemias present macrocytic anemias. Vague paresthesias,¹ frequently a smooth tongue, a high incidence of achlorhydria and the presence of a macrocytic anemia, however, may make either a primary diagnosis of pernicious anemia, or at least its coexistence appear not unlikely in many instances of leukemia.

Sinek and Kohn⁸ reviewed the literature of pernicious anemia and leukemia in 1930 and accepted only the case of Reichel.⁶ However, even this case cannot be accepted since the response to liver therapy was poor, there is no record of a reticulocyte response, the marrow findings are not given, post mortem examination was not done, and the best response was to x-ray therapy.

In 1936 Rich and Schiff⁷ described a case of pernicious anemia associated with chronic lymphatic leukemia in a 75 year old white male. The diagnosis was substantiated by a 16.5% reticulocytosis following liver therapy, the absence of vibratory sensation, and the demonstration of

degeneration of the posterior and lateral columns of spinal cord on microscopic examination.

Touw and Graafland¹⁰ described a case of aleukemic lymphatic leukemia in a 74 year old female, who also had a hyperchronic macrocytic anemia which responded well to liver therapy, and had a good reticulocyte rise (24.0%). Since the patient had leukemia infiltrations in the esophagus and stomach, as well as in the lymph nodes and marrow, the authors felt that this may have been a case of "symptomatic" pernicious anemia similar to those arising as a result of other destructive lesions of the stomach.

Sterne, Schiro and Molle⁹ reviewed the literature in 1941 and presented a case of subacute myelogenous leukemia which developed in a patient with pernicious anemia. Their patient, a 57 year old female, was seen in three hematologic relapses. On her fourth admission she was comatose and expired before the institution of therapy. Post mortem examination revealed leukemic infiltrations in the lymph nodes and kidney. There was also evidence of posterior (and suggestive lateral) column demyelination of the spinal cord. The authors mention another case known to them through personal communication with Doan.

Wooley¹² described a case which ten years after the diagnosis of pernicious anemia presented the clinical picture of chronic myelogenous leukemia. She was a 48 year old female who had a 62.8% reticulocyte response to liver therapy when first seen in 1932 and responded but very slightly in 1942.

From the Hematology Laboratory and the Hektoen Institute for Medical Research of the Cook County Hospital, Chicago, Illinois.

Aided by a grant from the Wilson Laboratories.

Luraine P., a 49 year old negro female, was admitted to Cook County Hospital on January 6, 1946 with a history of a ten pound weight lost during the previous six months, nausea, vertigo and headaches for two weeks, and vaginal bleeding for a week. Some months previously she had had a diarrhea, but on admission complained of constipation. Weakness of the legs was marked, and numbness of the toes was noted. Her knees tended to "buckle" on standing.

Physical examination revealed moderate pallor, slight jaundice of the sclerae, and a pale, smooth and shiny tongue. A thyroidectomy scar was present and dated back to 1932. A moderately loud harsh systolic murmur was heard in the second and third interspaces to the left of the sternum and was transmitted both towards the aorta and the apex of the heart. The liver was felt two centimeters below the costal margin. The spleen was not palpable. Deep reflexes were intact as was vibration sensation.

Gastric analysis revealed no free acid following the injection of histamine. The urine had + albumin, but was otherwise negative. Icterus index: 11, NPN: 26, Kahn test negative. X-ray examination of the gastro-intestinal tract was negative. Hematologic findings are summarized in Table I.

Between January 7th and January 21st she was on sub-optimal doses of liver extract and reached a reticulocyte count of 9.0%. On January 21st, 30 units of parenteral liver were given. On January 26th, the reticulocyte rose to 29.2% and a prompt clinical and hematologic recovery ensued. The white cell count, however, always remained low, with an absolute and relative granulopenia. She was maintained on liver therapy until July 1946 and then changed to five milligrams oral folic acid per day.

On July 17, 1947 a sternal marrow aspiration biopsy was performed in the hope of casting light on the cause of the granulopenia. Outstanding deviation from the normal was the great increase in lymphocytes, which though for the most part mature, revealed many very young cells. Frequent large collections of lymphocytes were encountered throughout the marrow. The findings

were diagnostic of chronic lymphatic leukemia. The marrow was re-examined on December 16, 1948 and revealed identical findings, with lymphocytes accounting for 33% of the marrow cells.

At the present writing the patient still attends Clinic and is well clinically. There are as yet no demonstrably enlarged peripheral lymph nodes nor is the spleen palpable.

SUMMARY

A case of pernicious anemia complicated by chronic (aleukemic) lymphatic leukemia is presented. The occurrence of the two diseases probably represents a simple coincidence. Since both conditions occur in approximately the same age groups, and since the life expectancy has been so much improved in pernicious anemia, this coincidence may be expected to increase. Four previously reported cases can be considered acceptable, of which two were also chronic lymphatic in type.

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PATHOLOGY CONFERENCES

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Presentation of Three Cases

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MULTIPLE MYELOMA OF BONES

CLINICAL SUMMARY:—Dr. W. Zurndorfer.—This 59 year old white male entered Alexian Brothers' Hospital in Chicago on March 3, 1948. Two years previously he had a transurethral resection of the prostate. Six months later he began to suffer pain which began in the hips and knees and ultimately involved most of the joints of the upper and lower extremities, with limitation of the use of the hands and difficulty in walking. Cystoscopic examination revealed marked irregularity, edema and sloughing of the bladder neck and elevation of the posterior commissure by prostatic tissue.

Laboratory data at the time of admission:—Erythrocytes, 3.65 million; hemoglobin, 11 gms. percent; leucocytes, 6,000 with 62 percent neutrophils. The Kahn test was negative. The urine was yellow, turbid, acid in reaction; the specific gravity was 1.015; albumin was 4 plus with leucocytes, erythrocytes and coarsely granular casts. Upon slowly heating the urine to boiling, it first became turbid and then partially cleared as the temperature approached the boiling point (Bence-Jones protein). The total

serum protein was 6.5 gms. percent, with 3.1 gms. of serum albumin and 3.4 gms. of globulin. The albumin-globulin ratio was 0.91. Non-protein nitrogen was 31 mgms. percent. The patient left the hospital on March 17, 1948.

He entered the hospital again on June 26, 1948 with the same, but more severe complaints. At this time his erythrocytes numbered 3.00 million per cubic millimeter; hemoglobin was 9 gms. percent; leucocytes 5,450 per cmm. of which 65 percent were neutrophils. Results of urinalysis were essentially like those found in March. The total serum protein had increased to 9.3 gms. percent, with 3.9 gms. of albumin and 5.4 gms. of globulin. The albumin-globulin ratio was 0.7. Examination of the cerebrospinal fluid and of the gastric contents yielded normal values. The serum acid phosphatase was 1.2 King-Armstrong units. Roentgen films revealed no evidence of fracture or of other pathologic changes in the bones of the cranium or lower extremities. He was discharged from the hospital about the middle of July.

He re-entered the hospital on December 6, 1948 when his condition had become much worse.

At this time he was unable to walk and was confined to a wheel chair because of constant pain in his extremities. He had lost about 60 pounds since the beginning of his illness. The joints of all his extremities were enlarged by fusiform swellings, distorted in shape and partially ankylosed. A large hard mass was palpable on the outer surface of the left iliac bone in front of the left hip joint. The prostate was enlarged and its left lobe was firm but not hard. Urinalysis yielded findings similar to those reported. His erythrocytes had decreased to 2.39 million per cmm. the hemoglobin to 9 gms percent; the leucocytes were 9,200 per cmm. with 72 percent neutrophils. The serum acid phosphatase was 0.5 King-Armstrong units.

On December 8, roentgen films of the skull, thoracic spine and ribs revealed no evidence of neoplasm or other pathologic change. Examination of the pelvic region disclosed several decalcified areas in the neck and trochanteric regions of both femurs and in the right ischial bone. These areas had no typical configuration and resembled more the result of osteoporosis than a neoplasm. However, a neoplastic disease, such as multiple myeloma, was considered.

On December 31, 1948, the N.P.N. of the blood was 192 mgms. per cent. Death occurred on January 1, 1949.

CLINICAL DISCUSSION:—Dr. Frank Lusk:—This patient presents one of those perplexing diagnostic problems so often encountered in medicine in which the symptoms and physical signs are not distinctive of any particular disease but may be fitted into the pattern of many diseases.

When, as in this case, one meets such an incongruous clinical picture, one should think of some type of disease that is characterized by dissemination; such as, metastatic cancer, Hodgkin's disease, periarteritis nodosa, masked blood dyscrasias, and the like. In this patient, the Bence-Jones protein in the urine, coupled with the hyperglobulinemia and the inverted albumin/globulin ratio, pointed to involvement of bones and liver. With these findings, even in the absence of Roentgen-ray evidence of sharply circumscribed rarefying bone lesions, the most likely clinical diagnosis is multiple myeloma.

A feature of particular interest is the nephritis. This belongs to the type classified as lower neph-

ron nephrosis, which often occurs following shock, crush injuries, conjugated sulfa drugs and transfusions with mismatched blood. Due to the high plasma protein concentration, particularly of the globulins (e.g., hemoglobin, myoglobin) and Bence-Jones protein, the renal tubules become blocked with precipitated proteins, the tubular epithelium undergoes degeneration and the function of the kidneys is impaired. The resultant clinical picture is one of oliguria or anuria. In multiple myeloma degeneration of renal tubular epithelium occurs when the serum protein exceeds 9 to 10 grams per cent.

ROENTGENOLOGIC DISCUSSION:—Dr. M. Indovina.—This case is instructive from the roentgenological point of view in that it brings out an important point in the diagnosis of plasma cell multiple myeloma. It is generally believed that multiple myeloma is characterized by many small, punched-out, rounded areas of diminished bony density involving particularly the skull, pelvis and spine. However, this is the exception and not the rule, and such findings may be present only when the disease has reached an advanced stage. More frequently, we observe only a vague patch of osteoporotic bone, either in one or in several bones, such as the upper ends of the femur or humerus, or in a rib, a vertebral body in the ilium, with no apparent generalized involvement. The skull frequently does not show the conventional punched-out areas, even when there is involvement of a large part of the skeleton. Obviously, in cases which are seen early and have only indefinite findings, we must use every possible evidence obtainable from sources other than roentgenograms.

AUTOPSY FINDINGS:—Dr. Robert J. Banker.—On the skin of the face and sides of the neck was a thin layer of fine, white glistening material resembling uremic frost. The most important changes were in the bones, in the periarticular soft tissues and in the kidneys. Grossly, the bones had little evidence of the lesion actually present in that the marrow was not mottled but was rather uniform in color and consistency. However, in microscopic sections, the marrow was extensively replaced by tumor tissue consisting of modified plasma cells; that is, a diffuse type of plasma cell myeloma. The 4 by 5 cms. mass attached to the upper anterior part of the left femur and to the lateral surface of the left iliac bone was pale yellow brown, firm, trans-

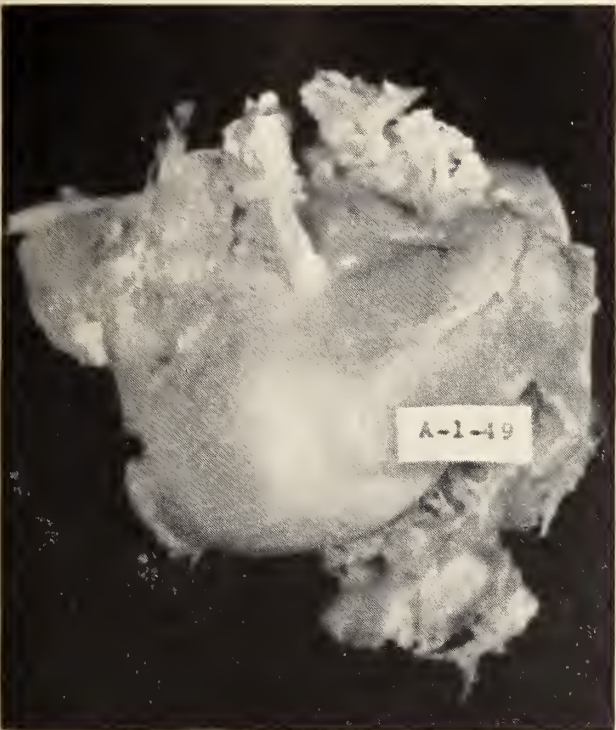


Figure 1. Photograph of the tumor-like mass of amyloid attached to the left hip joint.

lucent, friable tissues and contained several cavities filled with soft cheesy material. (Fig. 1.) Sections from this mass and from the lesions about the joints were hyaline and resembled amyloid. Smaller, more diffuse deposits of similar material were found in sections of the lungs, heart and spleen. The kidneys were slightly reduced in size and together weighed 265 grams. The renal cortex was pale, 2 to 3 millimeter thick and the cortical markings were not distinct. In sections, many renal tubules were filled with homogeneous material resembling large hyaline casts, some of which stained palely while others stained blue-black as if partially calcified. (Fig. 2.) Giant cells were associated with many of these masses. Many tubules were atrophic or had disappeared and in these regions the connective tissue stroma appeared to be moderately increased and was slightly infiltrated with lymphocytes. The glomeruli, in general, were well preserved; only a few had been transformed into hyaline scars; none had deposits of amyloid. The renal arteries and arterioles were essentially normal.

The significant pathologic changes in this case may be summarized as follows: Diffuse plasma cell myeloma of the bones; chronic nephritis of the so-called lower nephron type, probably as-

sociated with long continued excretion of large amounts of Bence-Jones protein; large amyloid deposits, about the joints of the extremities, and small focal deposits of the lungs, myocardium and spleen; fatty changes of the liver; and broncho-pneumonia of the lungs.

CLINICO - PATHOLOGICAL CORRELATION:—Dr. J. P. Simonds.—Multiple myelomas usually appear as focal, osteolytic lesions scattered throughout the skeleton. The bones involved in order of frequency are, the skull, vertebrae, ribs, pelvis, femur, humerus, clavicle, ulna, tibia, radius and fibula. Since the lesion is osteolytic, pathologic fractures are not uncommon, and this may have medicolegal significance.

Bence-Jones proteinuria, while not pathognomonic of multiple myeloma, is sufficiently frequent in the disease (50 to 65 percent of cases) always to suggest the presence of this tumor. Hyperglobulinemia is also a frequent accompaniment of multiple myeloma. The excretion of large quantities of Bence-Jones protein for a

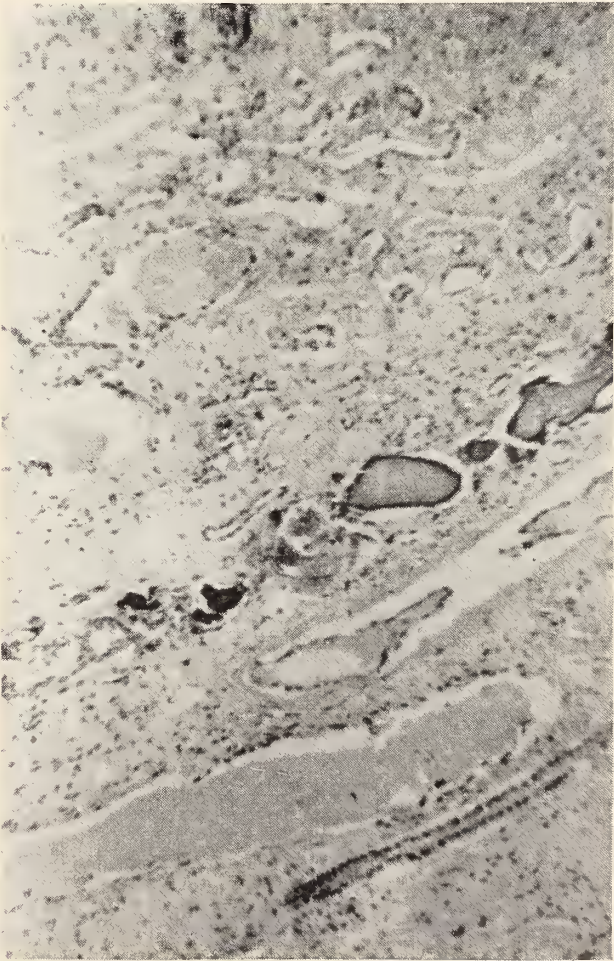


Figure 2. Photomicrograph illustrating partially calcified, large casts blocking the lower part of a nephron.

moderately long time usually damages the kidneys and may even cause death from uremia, as in this case. When urine is tested for albumin by precipitation with acids (nitric or sulphosalicylic) Bence-Jones protein may be missed. This substance can be recognized only by its peculiar precipitation and re-solution with heat.

Amyloidosis is not uncommon in multiple myeloma. When it does occur it resembles, in its distribution, primary amyloidosis rather than the form which occurs secondarily in tuberculosis, chronic osteomyelitis, etc.; i. e., it is deposited in large masses in unusual locations (periarticular tissues, lungs, myocardium), rather than in the liver, spleen and kidneys, as in the secondary type. Deposits about the joints, resembling, grossly, chronic arthritis, as in this case, are especially rare. Tarr and Ferris (*Arch. Int. Med.*, 64: 820, 1939) found only 10 cases in the literature.

The marked anemia in this case was probably due to the replacement of bone marrow by diffuse growth of the tumor throughout the skeleton.

CHRONIC GLOMERULONEPHRITIS

CLINICAL SUMMARY:—Dr. J. Thometz.—This 45 year old white male entered Alexian Brothers' Hospital on November 11, 1948 on the service of Dr. E. M. Berger. He complained of shortness of breath, cough, expectoration, difficulty in swallowing, frequent headaches and occasional epistaxis, all of one month's duration. One year previous to admission he was in another hospital with pneumonia and bilateral pleurisy and swelling of the hands and feet. He recovered and returned to work until the onset of his present symptoms one month previous to his admission to this hospital. Physical examination revealed a well developed, well nourished white male who was moderately dyspneic. A few small, firm, discrete lymph nodes were palpable in each inguinal region. Moist rales were heard over both lung fields. The heart borders were said to be within normal limits, and a systolic murmur was heard at the apex. The margin of the liver was two inches below the right costal margin and was smooth and tender. During the first week in the hospital he had nausea and vomited repeatedly. His blood pressure was recorded as 208/110 mm. Hg.

Laboratory data: The specific gravity of the urine ranged between 1.013 and 1.009; albumin was 3 to 4 plus; and erythrocytes, leucocytes and many hyaline and granular casts were present on each examination. On one occasion a trace of sugar was found. The red cells in the blood ranged from 2.89 to 2.79 million per cubic millimeter; the hemoglobin was 9.5 gms. percent. Leucocytes ranged from 18,800 with 95 percent neutrophils to 11,450 with 85 percent neutrophils.

An intravenous pyelogram revealed practically no excretion of the dye by the kidneys. Fluoroscopic and roentgenologic examinations showed an increased of the rugal markings in the pyloric region of the stomach and in the duodenum. These were thought to be due to gastritis and duodenitis. Examination of the remainder of the gastrointestinal tract revealed no abnormalities.

The patient was given a high protein-low salt diet and began to improve. Nausea and vomiting ceased. On November 22, his blood pressure was 170/110 mm. Hg. He was discharged on November 24, much improved.

He was readmitted to the Hospital on December 14, 1948 with the same complaints as on the previous admission but with more marked dyspnea and with pain across the chest. Moist rales were audible over both lung fields with some dullness on the right side. A friction rub was heard over the precordium. His blood pressure was 142/102 mm. Hg. The abdomen was tender over the right hypochondrium and the liver was palpable below the right costal margin. Orthopnea developed and he was given oxygen and digifolin. He continued to complain of difficulty in swallowing, was nauseated and vomited frequently. Urinalysis yielded results similar to those of the previous admission. The red cells of the blood were 2.38 million per cubic millimeter, with 8 gms. percent of hemoglobin. The leucocyte count was 14,800 with 83 percent neutrophils. He received two transfusions of 500 cc. each of whole blood. Blood chemistry: Non-protein nitrogen was 134 mg.; creatinine, 5.2 mg; chlorides, 640 mg. (109 milliequivalents); and sugar 108 mg., per 100 cc. of blood. A white, glistening, frost-like material was noted on the skin of the face, neck and arms. He developed an occasional tremor and signs of cere-

bral irritation and mental confusion and died December 31, 1948.

CLINICAL DISCUSSION:—Dr. L. J. Latz.—This man aged 45 years had hypertension, congestive heart failure and renal disease. In the condition in which the patient was first seen it was difficult, if not impossible, to determine whether the nephritis came first with resultant hypertension, or whether the elevated blood pressure ultimately caused functional impairment of the kidneys. Of some interest is the history of pneumonia one year previously. One wonders whether this might not have been a pulmonary intaret in a patient with chronic heart disease, a not uncommon episode.

The cardinal signs and symptoms of chronic glomerulonephritis were present:—high blood non-protein nitrogen and creatinine; albumin, casts and microscopic blood in the urine; inability to concentrate urine with the specific gravity fixed at a maximum of 1.013; frequent gastrointestinal upsets; and secondary anemia. The terminal signs of oliguria, cerebral irritation and mental confusion, pericarditis and skin frost completed the picture. On the other side of the combined pattern was evidence of left ventricular failure on the basis of hypertensive heart disease:—dyspnea, pulmonary edema with classical MacKenzie rales, enlarged liver and apical systolic murmur. The heart failure was managed successfully with digitalis and aminophylline and other supportive measures during his first stay in the hospital. His renal insufficiency, however, was less amenable to treatment. It was the old story of the progressive damage and destruction of glomeruli until the patient passes into a state of intractable uremia which results in death.

AUTOPSY FINDINGS:—Dr. Robert J. Banker.—Uremic frost was present over the face, neck and shoulders. The kidneys were small and weighed together only 190 grams; their capsules stripped with difficulty leaving a red to reddish tan, irregularly granular surface. Microscopically they showed the characteristics of a late stage of chronic glomerulonephritis. Few intact glomeruli remained. Most of them had been transformed into hyaline scars or were in process of such transformation. The renal tubules were reduced in number and most of those present were small and atrophic. The connective tissue stroma was increased and was moderately infil-

trated with lymphocytes. The lumen of the arteries and arterioles was reduced in diameter, chiefly as a result of fibrosis of the intima. The heart was markedly hypertrophied and dilated. Unopened, it weighed 900 grams; opened and emptied of blood, it weighed 585 grams; that is, it contained 315 grams of blood which indicates a high degree of dilatation. The heart valves and the myocardium were essentially normal. The pericardium was covered with a thick layer of reddish gray exudate, probably uremic pericarditis. Disturbances of the circulation were manifested by general passive congestion of the viscera; edema of the lungs and scrotum; ascites and bilateral hydrothorax. The rugae of the antrum of the stomach formed large, thick, dark purple red longitudinal ridges 6 to 8 mm. in diameter and up to 4 cm. in length. In the muscosa of the anterior wall of the esophagus, at about the level of the bifurcation of the trachea, was a grey fibroma, 5, 15, 20 mm.

CLINICO-PATHOLOGIC CORRELATION:

—Dr. J. P. Simonds.—Chronic glomerulonephritis is a progressive disease, characterized by the continuous or periodic destruction of renal units. When it runs its natural and complete course it ends in death from uremia. Interference with the flow of blood through the kidney, due to the obliteration of the capillaries in the glomeruli, induces hypertension. In the late stages of the disease the heart is almost invariably hypertrophied. The life of a patient with chronic glomerulonephritis is, therefore, subjected to a double threat:—congestive failure of the hypertrophied heart and uremia. The onset of congestive heart failure increases the danger from uremia. This patient's blood pressure decreased, while in the hospital, from 208/110 to 142/102 mm. Hg. At the lower level, the hydrostatic pressure of blood in the residual functioning glomeruli was probably not adequate to maintain total glomerular filtration at a rate sufficient to prevent the accumulation of nitrogenous waste products in the blood. Patients with chronic glomerulonephritis may die from uremia, or from congestive heart failure or from a combination of both, as in this case.

When chronic glomerulonephritis develops insidiously, the terminal stages ending in death from uremia may progress with remarkable rapidity. In this case, the total duration of the

disease, from the first definite clinical manifestations to death, was approximately two and one-half months. But the gross and microscopic appearances of the kidneys indicated that the disease had been present and progressing for a much longer period. The factor of safety, or functional reserve, of the kidneys is great. Progressive destruction of renal units may progress slowly and insidiously for months or perhaps for years without definite clinical manifestations. But when the factor of safety or functional reserve of the kidneys has finally been completely exhausted, evidences of renal insufficiency may develop with remarkable rapidity. Regular, periodic health examinations, or physical check-ups would reveal the disease at an earlier stage when some attempts might be made to check its progress. Insidiously progressive, chronic glomerulonephritis with a rapidly developing terminal stage can be differentiated with difficulty from essential hypertension that ends in malignant hypertension. Fixation of the specific gravity of the urine, albuminuria, hematuria and casts may be present in both diseases. Perhaps the most helpful differential diagnostic sign is anemia. This is usually present and severe in chronic glomerulonephritis, but is rare or less marked in malignant hypertension.

The acute fibrinous pericarditis and the changes in the stomach, the latter demonstrated by roentgenologic examination before death, were probably on a uremic basis. The persistent difficulty in swallowing was evidently due to the fibroma of the mucosa of the esophagus.

DIABETES MELLITUS

CLINICAL SUMMARY:—Dr. J. O'Brien.—The patient, a 47 year old white male, entered Alexian Brothers' Hospital on November 29, 1948. He had been known to be diabetic for five years and took 20 units of protamine-zinc insulin daily without attention to diet. One week previous to admission he ceased to take insulin except on the morning of the day he entered the hospital. One week before admission he developed a cold and three days later began to have pain in the right side of his chest. Upon physical examination he was cyanotic, and had widespread coarse mucous rales and decreased breath sounds over the right side of his chest. Respirations were suggestive of the Kussmaul type. Heart

sounds were too faint and indistinct to be evaluated. His blood pressure was 72/42 mm. Hg., and his pulse was feeble. Examination of the abdomen was negative. There was no edema. No urine was obtained by catheterization. Blood sugar was 610 milligrams, non-protein nitrogen was 55 milligrams and creatinine was 2.2 milligrams, per cent. He was semicomatose but did respond somewhat to questioning. Respirations became slow and shallow, the pulse imperceptible and the patient died four hours after admission.

CLINICAL DISCUSSION:—Dr. F. Knoepfler.—The medical management of this case was difficult. According to the meager history obtained from him, he was a diabetic who had received daily doses of 20 units of protamine-zinc insulin irregularly over five years. He had taken the usual amount on the morning of admission but had omitted its use during the preceding week. Blood sugar determination revealed 610 milligrams per 100 cc. The urine could not be examined for sugar, acetone and diacetic acid because the bladder was empty on two catheterizations. Although coma, probably diabetic in origin, appeared to be impending, the already severe circulatory failure dominated the general clinical picture and demanded more immediate attention.

That intrinsic renal damage was not the cause of the anuria, and, therefore, not the cause of the patient's symptoms could be assumed because the non-protein nitrogen and creatinine of the blood were only slightly elevated. The anuria could not be explained on the basis of reduced urine flow due to marked dehydration with electrolyte depletion. His skin turgor was normal. The conclusion appeared to be justified that the suppression of urine was due to circulatory failure and shock, which, in this case, were the most prominent features clinically. The evidence for this conclusion was the following: (1) cyanosis was present from the time of admission and was not completely relieved by oxygen therapy; (2) congestion of the lungs and liver was evident; (3) auricular fibrillation was present with a rapid irregular ventricular response of 115 to 167 beats per minute as indicated by the electrocardiogram which was taken immediately; (4) a low blood pressure of 72/42 mm. Hg. may cause oliguria and anuria with a slight increase of non-protein nitrogen and creatinine in the blood, as in this case. It was not possible to determine

blood potassium and calcium, changes which may influence circulatory efficiency.

The problem of the cause of the acute circulatory failure was equally difficult. Physical examination revealed definite evidence of pneumonia in the right upper pulmonary lobe; and his temperature was 101 degrees F. There was no clue to indicate whether the auricular fibrillation had existed prior to this acute illness. On the other hand, we know that it may occur in acute infections, such as pneumonia, and in some intoxications. Congestive heart failure may be coincidental with, contributed to, or entirely caused by rapid irregular ventricular contractions. It seemed necessary to concentrate the treatment upon the acute circulatory failure and to use drugs and type of administration for quick action. Strophanthin, 0.4 mg., was administered by slow intravenous injection, whereupon a slight improvement in the quality of the pulse occurred. Further efforts to counteract the dangerously low blood pressure were made with Coramine, 2 cc. and Paredrine, 10 milligrams, intramuscularly. Oxygen was administered from the beginning.

On account of the hyperglycemia, 50 units of regular insulin were given. A larger amount was thought to be inadvisable because the anuria rendered impossible the determination of the presence or absence of glycosuria. Later, 1,000 cc. of physiological salt solution with 5 percent glucose and 80 units of regular insulin were given by slow intravenous infusion. To restore further the electrolyte balance, Ringer's lactate solution was given and Hartman's solution ordered, being careful, however, not to overdo intravenous administration of fluids in the presence of cardiac failure and anuria. Death occurred before the latter order could be carried out.

In spite of all these measures the condition of the patient improved temporarily for only about

half an hour. Following this he rapidly grew worse and expired four hours after admission.

AUTOPSY FINDINGS :—Dr. Robert Banker:—The significant findings at autopsy were:—Chronic pancreatitis with practically complete fibrous tissue replacement of the parenchyma with infiltrations lymphocytes and plasma cells and marked dilatation of the ducts. Scattered islands of Langerhans were present. The right lung had an upper lobar pneumonia and sero-purulent pleurisy. There were also moderate hypertrophy of the heart (440 grams); calcification of the mitral ring; passive hyperemia of the lungs, liver and spleen; and chronic pyelonephritis. The urinary bladder contained about 2 cc. of urine.

CLINICO-PATHOLOGICAL CORRELATION:—Dr. J. P. Simonds.—No satisfactory explanation could be found for the extensive fibrosis of the pancreas; that is, there were no stones or other demonstrable obstruction of the large pancreatic ducts. The infiltration with lymphocytes and plasma cells suggest a diffuse pancreatitis with fibrous replacement of the parenchyma. Although islets were still present, the patient was known to have been a diabetic for 5 years. No other history was available to indicate the time or the cause of the pancreatitis. The effects of omission of insulin for a week were aggravated by the onset of lobar pneumonia. The gross and microscopic appearance of the kidneys were those of chronic pyelonephritis and arteriosclerosis of the renal vessels. These findings and the slight hypertrophy of the heart suggest that he had had some degree of hypertension for a moderately long time. The anuria can be accounted for on the basis of the low blood pressure which was below the level at which the kidneys can produce urine.

HAY FEVER DRUG MAY CAUSE URINARY OBSTRUCTION

Pyribenzamine hydrochloride, an antihistaminic drug that has been used for hay fever and to relieve symptoms of colds, may cause urinary obstruction, says Samuel A. Wolfson, M.D., Los Angeles, in the July 16 Journal of the American Medical Association.

The antihistaminic drugs inhibit the action of histamine, a chemical released from body tissues during allergic reactions.

Dr. Wolfson reports a case in which urinary obstruction was attributed to pyribenzamine hydrochloride.

"Various side reactions from the use of pyribenzamine hydrochloride have been observed," he points out. "Drowsiness, dizziness, gastric disturbances, and headache have been the responses most commonly evoked. Less frequent in occurrence have been urinary burning and urinary frequency.

"I recently saw a patient whose reaction to the drug involved the urinary tract. To prove the validity of the assumption that the distress was due to the antihistaminic agent, it was planned to reproduce the condition at a later date.

"The patient was observed for two months, during which urinary function remained normal. On May 3, 1949, the patient received pyribenzamine hydrochloride at 7 a.m. and again at noon. About 4 p.m. the urinary difficulty reappeared. No more of the drug was administered. The symptoms rapidly subsided and have not returned to date."

The creation of adequate medical service must of necessity be the ultimate product of the co-working of many forces: enlightened local leadership, an informed and cooperative citizenry, a corps of well-trained doctors, and the financial resources necessary to enable these doctors to earn a living and to establish and maintain efficient hospital services. *Medicine in the Changing Order*, Rep. N. Y. Academy of Med. Comm., The Commonwealth Fund, 1947.

A girl entered the manager's office to apply for a job, and, when asked if she had any particular qualifications or unusual talents, stated that she had won several prizes in crossword puzzle and slogan contests.

"That sounds good," the manager told her. "But we want somebody who will be smart during office hours."

"Oh," she explained brightly, "this was during office hours."

IN AMERICA SOMETHING CAN BE DONE

Common sense, ingenuity and perseverance are necessary in the treatment of patients with chronic conditions. The physician in charge must at all times maintain an attitude of optimism, which will, in turn, be communicated to the patients. Each case presents individual problems. In one case, a patient with bilateral cerebral thrombosis, who had been bedridden for many years, received the necessary amount of muscle reeducation and strengthening but was unable to stand because of a marked tendency to fall backward. This was counteracted by increasing the height of his heels, so that the center of gravity was shifted forward. Later, when the patient acquired good equilibrium and muscular control, the heels were lowered gradually until they were of normal height.

Excerpt, Rehabilitation of the Chronic Medically Ill, Otto Eisert, M. D., Brooklyn; Arch. Phys. Med., July, 1949.

Junior, who was still too young to walk, had cried and fretted all day, until his harassed mother thought she would lose her mind. She told her husband all about it when he came home that evening.

"Well, remember," he reminded her, "the hand that rocks the cradle rules the world."

About 8:30 that night, with Junior still crying as before, she said to him: "Assume world domination for a couple of hours, darling, while I go to the movies."

—Overmatter

Prof. Schnootz, attending a reception, said, "You all know I'm a university professor and I know you're dying to ask questions. Who wants to be first?"

One fellow asked, "Is it true that professors are absent-minded and have bad memories?"

"That's a fallacious lie. Professors haven't got bad memories. They're not absent-minded. Don't you think I know where I am right now? And tomorrow I'll know where I was last night! Would somebody like to ask another question?"

With that, another fellow questioned: "Is it true that professors are absent-minded and have bad memories?" To which the professor replied: "Fine! I knew that sooner or later somebody would ask me that!"

Diplomacy is the ability to take something and act as though you were giving it away.

—Banking

NEWS OF THE STATE



COOK

Paul Jordan Goes to Michigan.—Dr. Paul H. Jordan, assistant professor of psychiatry, Chicago Medical School and chief neuropsychiatrist, Veterans Administration Hygiene Clinic, has been appointed to the post of director of the State Child Guidance Clinic at Flint, Michigan. Dr. Jordan began his duties September 1.

Personal.—Dr. Robert M. Graham, chief surgeon for the Pullman Company, has been named chairman of the medical, education, and welfare section of the 1949 Chicago Community Fund campaign. Dr. Willard O. Thompson and Dr. F. Lee Stone will supervise solicitation of the medical and dental profession in the campaign for funds.—Dr. Frank Pokorney has resigned as health commissioner of Cicero, effective July 31, after serving twenty years in the position. He has been succeeded by Dr. Thomas Kallal.—Dr. Edwin R. Levine, formerly chief of the division of chest surgery at Michael Reese Hospital, has announced his return to private practice at 109 North Wabash Avenue, Chicago.

Society News.—Dr. Philip Thorek addressed the Annual Southwest Texas Medical District Meeting in Corpus Christi, Texas, July 8-9, 1949. He spoke on the following three subjects: "The Acute Abdomen", "Intestinal Obstruction" and "Jaundice." Dr. Walter J. Reich addressed the Tri-County Medical Society in Lake Geneva, Wisconsin, recently, on "The Diagnosis and Management of Common Gynecological Conditions."

Specialty Society Elections.—At the annual meeting of the Chicago Gynecological Society, June 17, 1949, Dr. Eugene A. Edwards was installed as president. Other officers of the society were chosen

as follows: Dr. John I. Brewer, president-elect; Dr. M. Edward Davis, vice president; Dr. Edward M. Dorr, secretary; Dr. Fred O. Priest, treasurer; Dr. Paul Fox, pathologist and Dr. Edwin J. De Costa, editor.—At a meeting of the Illinois Psychiatric Society, May 5, 1949, the following were elected to office for the 1949-1950 season: Dr. V. G. Urse, president; Dr. D. Louis Steinberg, vice president; Dr. Louis Boshes, secretary-treasurer; Dr. Maxwell Gitelson and Dr. Benjamin Boshes, councilors.

Dr. Chesrow Goes to Haiti.—Dr. Eugene J. Chesrow, professor of surgery, Chicago Medical School, has been appointed exchange professor of surgery to the University of Haiti for the years 1950-1951, it was announced August 6. Dr. Chesrow was recently presented the Legion of Honor and Merit medal and citation by the government of Haiti. This decoration, the highest award of the Haitian government, was given to Dr. Chesrow in recognition of a long period of surgical work among the poor in Haiti, and for service in fostering Haitian-American relationships.

Hospital Residents Compete in Branch Meeting.—The North Shore Branch, Chicago Medical Society, devoted its regular meeting, May 3, to its first annual competition by residents of Chicago hospitals. The speakers were given fifteen minutes to present their selected papers and the judges were John J. Sheinin, dean, Chicago Medical School; Wright Adams, associate dean, University of Chicago School of Medicine and Robert Berson, associate dean, University of Illinois College of Medicine. Edward H. Storer, resident in surgery, University of Chicago, won the first award of \$150 with his paper on "Va-

gotomy and Antrum Resection in the Mann-Williamson Ulcer." Second and third awards went to Frank P. Paloucek, resident in obstetrics and gynecology, St. Anthony De Padua Hospital, "Weight Gain and Pre-Eclamptogenic Toxemia" and Richard L. Merkel, resident in obstetrics and gynecology, Ravenswood Hospital, "Hemolytic Transfusion Reaction with Recovery from Anuria." Honorable mention was given to William H. Hart, resident in surgery, Illinois Masonic Hospital, "Sedation of the Aged Patient" and Kenneth G. Jones, resident in orthopedic surgery, University of Illinois, "Any Body—A History of the Quest for Cadavers." Dr. John L. Reichert is president of the North Shore Branch and Dr. Wayne Slaughter, secretary.

Symposium on Plasma Proteins.—A symposium on plasma proteins will be given under the auspices of the University of Illinois College of Medicine and sponsored by the Robert Gould Research Foundation, Friday and Saturday, September 23-24, in Chicago.

Dr. John B. Youmans, dean of the University of Illinois College of Medicine, said that the symposium is designed to promote research and understanding of the subject.

Sixteen prominent speakers will present various aspects of the plasma proteins, such as formation, fractionation, immunological and endocrine relationships, hypoproteinemia, relation to edema, isotope tracer studies, relation to the liver, and related subjects.

Physicians Abroad.—Dr. Carroll L. Birch, associate professor of medicine, University of Illinois College of Medicine, has been granted a sabbatical leave of absence for a six-month tour of Africa where she will study African Sleeping Sickness and other tropical diseases. Dr. Birch, a specialist in tropical medicine, was scheduled to arrive at Douala, French Camerouns, July 16. She will make her headquarters at Elat. Dr. Birch will travel with missionaries, Dr. and Mrs. George Thorne, and will make a tour of Presbyterian missions of Equatorial Africa. She will also visit Lake Victoria prior to returning to the United States in late December. Dr. Birch plans to work primarily on the blood and bone marrow findings in African Sleeping Sickness. Very little research has been conducted on this subject, especially on bone marrow.—Dr. Paul H. Holinger, associate professor of otolaryngology at Illinois, left Chicago July 7 for a two-month speaking tour of Europe and South America. Dr. Holinger presented four endoscopic films before the International Congress of Otolaryngology in London, July 15-23. He also presented a paper on "Endoscopic Photography in Otolaryngology and Broncho-Esophagology." En route from England to Argentina, he presented two lectures in Lisbon, Portugal, July 25-26. The lectures were illustrated by the endoscopic still and motion pictures prepared under the auspices of the Jacques Holinger Memorial Fund at the University

of Illinois Research and Educational Hospitals, Children's Memorial Hospital and St. Luke's Hospital. Dr. Holinger was invited to serve as honorary president of the Argentine Congress of Broncho-Esophagology which was held in Sante Fe, August 15-16. The Argentine Society of Broncho-Esophagology, through its president, Dr. Irigoyen Freyre, also invited Dr. Holinger to give two courses in Broncho-Esophagology at the medical school in Sante Fe. While in South America, he also presented lectures at Cordoba, Buenos Aires, Porto Alegre and Rio de Janeiro. Dr. Holinger plans to return to the United States some time in September.

Grants for Research.—Five research grants in the total amount of \$21,460 have been awarded to the University of Illinois College of Medicine, it has been announced by Dr. A. C. Ivy, vice-president of the University in charge of the Chicago Professional Colleges.

The Chicago Heart Association has awarded a grant of \$10,000 to Dr. C. C. Pfeiffer in the department of pharmacology for the study of the effects of stress and diet on the regulation of the flow of blood into the kidneys.

The National Cancer Institute has renewed a grant in the amount of \$5,940 for a study to determine which dyes will be taken up by the cells of the stomach in an attempt to produce cancer of the stomach by the feeding of dyes. The study is being conducted by Dr. Ivy and Dr. Francis Flood in the department of clinical science.

A check for \$2,500 has been received from the Roche Foundation in support of a fellowship in the department of pharmacology. The fellow is assigned to a research project involving a continuation of the study of curare-like drugs, under the supervision of Dr. Klaus R. Unna.

Abbott Laboratories has made a grant of \$2,120 for the study of a synthetic sweetening agent which has no caloric value. Human and animal toxicity studies are being conducted by Dr. M. I. Grossman and Miss Charlotte Robertson of the department of clinical science to determine its suitability for usage in diabetic and reducing diets.

Hoffman-LaRoche, Inc., has awarded a grant in the amount of \$900 to subsidize pain tests involving the study of analgesic drugs in human volunteers. The tests are being conducted by the department of pharmacology, under the direction of Dr. Pfeiffer.

Fellowship Awarded Dr. Hawthorne.—Dr. E. W. Hawthorne of the University of Illinois College of Medicine has been awarded a Life Insurance Medical Research Fund Senior Fellowship. The Fellowship carries a stipend of \$3,500.

Dr. Hawthorne will work on research studies concerning high blood pressure caused by kidney disorders. He will conduct the studies under the guidance of Dr. G. E. Wakerlin, Professor and Head of the Department of Physiology.

Dr. Hawthorne is a Research Assistant in the Department of Physiology.

Fellowship Honors Deceased Physician.—The gift of a \$10,000 Subsidiary Scholarship to The Chicago Medical School in memory of the late Dr. I. Harrison Tumpeer is announced by Dr. John J. Sheinin, dean of the school.

Dr. Tumpeer was a graduate of the University of Chicago, and received his medical degree at Rush Medical College. For a period of two years he was an associate of Dr. Isaac A. Abt, and then was appointed to the staff of Michael Reese Hospital and the Post Graduate Medical School and Hospital. Of the latter, he became Professor and Head of the Pediatric Department. He was also Adjunct Pediatrician of the Michael Reese Hospital; Director of the Pediatric Department of the Michael Reese Dispensary and Attending Pediatrician.

Northwestern Research Points Way to Cure for Undulant Fever.—Two Northwestern University physicians reported recently that BAL (British Anti-Lewisite) may become an effective weapon against undulant fever. Their experiments show that the compound kills the disease microbes in test tubes.

Dr. Harry B. Harding, associate professor of bacteriology, and Dr. Gordon W. Raleigh, on the staff of the department of medicine, both of the Medical school faculty, told results of test tube research with the drug before a meeting of the Evanston Hospital Alumni Association. Both men are on the hospital staff.

Animal studies are now under way to determine whether BAL, originally developed as an antidote for Lewisite, a poisonous arsenic gas, may be employed as a cure for undulant fever in humans.

DOUGLAS

Walter Blaine Plans Retirement.—Dr. Walter C. Blaine, who has been practicing in Tuscola since 1898, has sold his office building and practice in preparation to begin a gradual retirement, according to the Urbana Courier. He will establish a small office in his home where he will continue to see some of his patients. Dr. L. V. Gates, formerly of Evanston, has purchased Dr. Blaine's building and practice and is already located there. Dr. Blaine, who is a Fifty Year Club member of the Illinois State Medical Society, has been an officer of the Society, secretary of the Douglas County Medical Society and physician for the Chicago and Eastern Illinois Railroad.

DU PAGE

Dr. Heidgen Goes to Arizona.—Dr. Martin F. Heidgen, superintendent of Memorial Hospital, Elmhurst, recently announced his resignation to become director of the Tucson Medical Center, Tucson, Arizona. The position was to be effective July 8. Dr. Heidgen has served continuously in the office of administrator of the hospital since corps of the United States Army during World War. II.

KNOX

Physician Honored at Public Meeting.—Dr. J. U. Long was honored at a public picnic supper at the Maquon village park recently to celebrate his years of practice there since April 13, 1888. The physician was presented with a box of his favorite cigars and a purse of money.

LIVINGSTON

Society Election.—Dr. Andrew J. McGee, Dwight, was re-elected president of the Livingston County Medical Society at a recent meeting at the Pontiac Reformatory. Other officers are Dr. Otis Law, Pontiac, vice president and Dr. James Langstaff, Fairbury, secretary-treasurer.

MADISON

No Fees Charged During Tornado Emergency.—Members of the Wood River Township Medical Society, Wood River, voted unanimously to render no fees during and after the emergency phase of the recent tornado. The group includes sixteen township physicians. The physicians established an emergency hospital at American Legion hall where they were on call twenty-four hours each day.

In addition to their work at the scene of the tornado, physicians donated the use of X-ray and other medical equipment and supplies. Emergency house and office calls and medical and surgical treatment at hospitals were also administered free of charge.

The medical society inaugurated with the assistance of the Illinois Department of Public Health and Alton-Wood River area nurses, the typhoid immunization program which resulted in about 4000 persons being inoculated.

GENERAL

Welfare Department Statistics.—The resident population in all institutions of the Department of Public Welfare, June 30, 1949, was 47,275. This does not include pupils for Schools for the Blind and the Deaf who were on summer vacations. On the books of all institutions, including those present, in family care, on conditional discharge and all other absentees were 54,490. The greatest increase over June of last year was in the nine hospitals for the mentally ill, in which the population rose 822. During the fiscal year ending June 30, there were 13,467 admissions, of this number 3,752 were voluntary. There were 38,650 patients on the books, June 30, 1949. The institutions for the mentally defective (Dixon State Hospital and Lincoln State School and Colony) showed an increase of 94 over the previous year. The resident population was 9,282, with 10,634 on the books. There were 357 in Security Hospital June 30, 1949, and of this number, 279 were mentally ill, and 78 were mentally deficient. At Neuropsychiatric Institute, where most admissions are temporary for special treatment, 70 patients

were present at the end of the month. Of this number, 60 were admitted during the month. Clinics for trachoma control and prevention of blindness in southern Illinois treated 457 for trachoma, 67 for glaucoma, and 375 for other eye ailments. Nine patients were hospitalized for operations. The Illinois Eye and Ear Infirmary received 8,222 patients in the Clinic, and listed 22,527 treatments during June. Five hundred and twenty-three were admitted to the hospital. For the fiscal year ending June 30, 1949, 96,614 patients were listed in the Clinic, and there were 237,319 treatments. The Chicago Community Clinic reported 638 interviews during the month. Of this number, 621 were former patients in State hospitals—265 at Elgin, 241 at Manteno, 38 at Chicago, 76 at Kankakee and 1 at Alton. The Boys' Training School, Girls' Training School, and Women's Reformatory reported 906 juvenile delinquents, felons, and misdemeanants present June 30, 1949. Fifty-one were received from courts and 41 were discharged. The pupils of Schools for the Blind and the Deaf were on Summer Vacations. There were 64 children present at Children's Hospital-School with 92 on the books. At Soldiers' and Sailors' Children's School, 281 were present. The Industrial Home for the Blind, Soldiers' and Sailors' Home, and Soldiers' Widows' Home reported 1,334 present June 30, 1949—a decrease of 19 as compared to one year ago. The Veterans' Rehabilitation Center in Chicago, and Veterans Clinics in Aurora, Champaign, and Rockford received 90 new cases during the month. There were 1,307 visits to the clinic in Chicago, 14 in Aurora, 147 in Champaign, and 24 in Rockford. Since opening of these Centers, 5,451 veterans have received treatment at Chicago, 51 at Aurora, 188 at Champaign, and 29 at Rockford. The Division of Veterans' Service reported 2,973 veterans present in all Welfare institutions, June 30, 1949. Of this number, 1,715 were World War I veterans, and 706 World War II veterans. The Institute for Juvenile Research interviewed 182 new cases during the month. A total of 586 children and 683 adults, old and new cases, were examined and received treatment. The Division of Supervision of Field Services reported 50 placements in boarding homes, free homes, and wage homes during the month. In addition, 1,329 patients were interviewed in out-patient clinics, and there were 2,603 visits to the clinic during the month of June. Besides the 47,275 persons housed in institutions June 30, 1949, 21,024 received treatment in Department of Public Welfare clinics during June.

Clinical Congress Meeting on Surgery.—The Clinical Congress of the American College of Surgeons, always international in scope, will be exceptionally world-wide in character when it convenes in Chicago from October 17 to 23 because it will include the Sixth Inter-American Congress of Surgery, and because many delegates from the 13th Congress of the International Society of Surgery, which meets in New Orleans the previous week, are planning to attend the Chicago Congresses, ac-

cording to Dr. Irvin Abell, Louisville, Chairman of the Board of Regents. Delegates and visitors to the Sixth Inter-American Congress of Surgery will attend the sessions of the Clinical Congress from October 17 to 21, and will hold their own separate sessions on October 21, 22, and 23. Through the membership of the American College of Surgeons in the Association of Inter-American Congresses of Surgery, every Fellow, Dr. Abell states, is a member of the latter group and is entitled to attend its scientific and social sessions. Headquarters for both Congresses will be at The Stevens.

Sir James R. Learmonth, Edinburgh, will deliver the fourth Martin Memorial Lecture at the Presidential Meeting on Monday evening, October 17, when Dr. Dallas B. Phemister, Chicago, the outgoing president, will preside and will deliver the Presidential Address, and Dr. Frederick A. Collier, Ann Arbor, Michigan, will be installed as new President. Lord Webb-Johnson, London, President of the Royal College of Surgeons of England, will deliver the Fellowship Address at the Convocation on Friday evening, October 21, when fellowship will be conferred upon several hundred initiates.

Television of operations in color from St. Luke's Hospital to The Stevens will be a feature of each day's program during the Clinical Congress. The other events will include scientific sessions, official meetings, hospital conferences, medical motion picture showings, technical and scientific exhibitions, and operative and non-operative clinics in 24 hospitals in the Chicago area.

Scientific Assembly on General Practice.—The Second Annual Scientific Assembly of the Illinois Chapter, American Academy of General Practice, will be held October 9-10, 1949, at the Pere Marquette Hotel, Peoria. A fine course of scientific lectures of practical application has been arranged. Included among the speakers will be Dr. Andrew C. Ivy, "Psychosomatic Aspects of Gastric Ulcer"; Dr. Everett P. Coleman, Canton, "Tumors of the Thyroid"; Dr. J. W. Wilson, "Undulant Fever"; Dr. Herman De Feo, "Bedside Diagnosis of Cardiac Irregularities" and Dr. Le Roy Sloan, "Correlation of Laboratory and Bedside Findings." All doctors and internes are invited to attend. For information and arrangements contact Dr. Peter H. Furno, 4124 West Madison Street, Chicago.

HEALTH DEPARTMENT ACTIVITIES

Leading Causes of Death in the First Six Months of 1949.—There were 19,442 deaths registered in Chicago in the first six months this year as against 19,418 for the same period in 1948. This is an increase of 24 deaths, or 0.1% over last year. The leading causes of death were the same as in the 1948 period, with heart disease 1st and cancer 2nd. These diseases accounted for more than half of the deaths reported in the city.

Heart disease deaths were slightly higher than last year. There were 7,914 deaths reported through

June in 1949 as against 7,903 for the first six months of 1948. The death rate for heart disease was 433.6 per 100,000 population as against 430.1 for the same period in 1948.

Cancer deaths for the six-month period remained about the same, with 3,011 reported in 1949 and 3,018 reported for the same time in 1948. The death rate this year was 162.6 per 100,000 population, a slight decline from the rate of 164.2 for the same period in 1948.

Tuberculosis deaths decreased from 681 in the first six months of 1948 to 653 for 1949, a decline of 4.1%. The tuberculosis death rate was 35.4 per 100,000 population compared with a rate of 37.1 for the first six months of 1948.

There were 768 pneumonia deaths for a rate of 42.1 in the 1949 period compared to 661 and a rate of 36.0 in the first six months of 1948. Accidental deaths dropped from 1,001 and a rate of 54.5 in the first six months of 1948 to 584 and a rate of 31.7 in the first six months this year. Premature birth deaths were down from 425 and a rate of 23.2 in the 1948 period to 404 and a rate of 21.6 this year.

There were 1,311 deaths from intracranial lesions for a rate of 72.0 per 100,000 population in 1949 through June, compared with 1,239 deaths for a rate of 67.4 for the same period last year.

Deaths from nephritis were down to 919 and a rate of 50.2 for the period this year, as against 1,096 deaths and a rate of 59.6 in the first six months of 1948. Diabetes deaths were up to 665 and a rate of 37.3 this year compared with 621 deaths and a rate of 33.8 last year. Deaths from cirrhosis of the liver were also up slightly, to 334 and a rate of 18.2 for the 1949 period as against 310 deaths and a rate of 16.9 for the same time a year ago.

Mortality reductions, since 1940, in the ten leading causes of death have altered the rankings among these killers. Nephritis dropped from 3rd place in 1940 to 4th place in 1948, changing places with intracranial lesions of vascular origin. The nephritis death rate dropped from 88.7 in 1940 to 55.3 in 1948. All accidents (5th place) and tuberculosis

(6th) retained the same ranking, although the tuberculosis rate dropped from 59.4 to 36.5 in the to 8th place and diabetes rose from 8th to 7th. Premature birth deaths and cirrhosis of the liver remained in 9th and 10th place throughout the period.

MARRIAGES

JOHN C. SOUDERS JR., Rock Island, to Miss Louise A. Padburg of Oklahoma City, recently.

DEATHS

ANDREW V. DAHLBERG, Chicago, who graduated at Bennett College of Eclectic Medicine and Surgery in 1906, died July 22, aged 74. He was president of the South Shore Hospital.

ETHEL F. GAAL, Chicago, who graduated at the Royal Hungarian Elizabethian University, Hungary, in 1923, died July 13, aged 51.

WILLIAM ALBERT HINCKLE, Peoria, who graduated at The Hahnemann Medical College and Hospital, Chicago, in 1903, died in St. Francis Hospital, Peoria, July 9, aged 73.

JOHN C. MAJOR, Joliet, who graduated at Rush Medical College in 1900, died July 5, aged 72. He had practiced medicine in Coal City for several years before moving to Joliet.

LOUIS AMANDAS MUELLER, Chicago, who graduated at Rush Medical College in 1899, died June 4, aged 75, of arteriosclerosis and paralysis agitans.

JAMES LEONARD PARIS SR., Elizabethtown, who graduated at Chicago Medical School in 1928, died July 13, aged 62.

FREDERICK W. PATTON, retired, Mount Vernon, who graduated at Miami Medical College, Cincinnati, O., in 1884, died July 9, aged 94.

HAROLD E. PHILLIPS, Chicago, who graduated at Rush Medical College in 1920, died July 14, in Indianapolis, aged 55.

JACOB JOHN WESTRA, Champaign, who graduated at Rush Medical College in 1936, died in Mercy Hospital, July 17, aged 41. He was secretary of the Champaign County Medical Society, a member of the Champaign County Chapter of the American Cancer Society, and was on the board of the Illinois Heart Association.

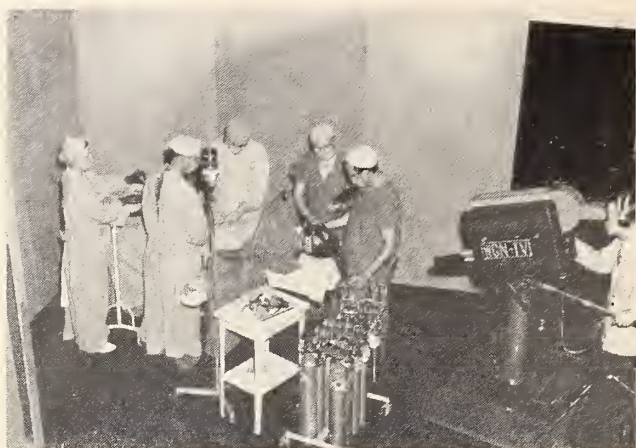
"For The Common Good"

Television Medicine on WGN-TV.—Three patients demonstrating different types of plastic repair appeared with Dr. Walter Mayne, Chicago, on the telecast over WGN-TV, July 27, entitled "Surgical Repair of the Face." Visual material included actual carving of the cartilage and instruments and casts used in this type of surgery.

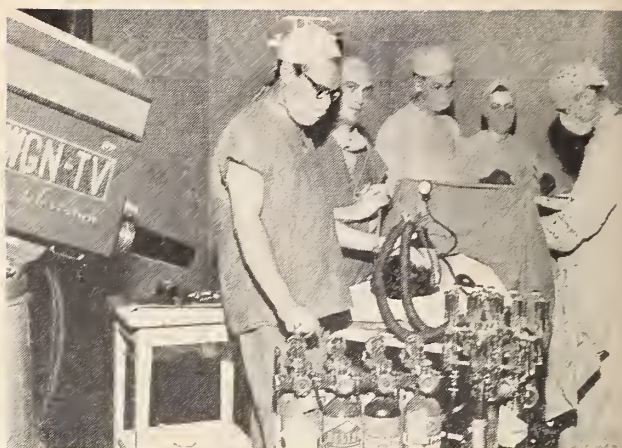
On August 13 Drs. Louis Limarzi and Paul Bedinger presented "The Story of Blood," visually demonstrating the taking of a blood count, the action of the centrifuge, slides on white and red

blood cells and sections of bone revealing marrow locations. The Central Scientific Company, Chicago, lent a centrifuge and microscope for the telecast.

"Guardians of Your Sleep" was the title of the telecast, August 10, when Drs. Max Sadove, anesthesiologist, James Cross, surgeon, Adolf Walker, assistant surgeon, Robert Foulke, assistant anesthesiologist, and Miss May Samuelson, R. N., portrayed typical pre and postoperative anesthesia care, as well as the typical operating room scene with emphasis on the giving of anesthesia, and a blood



The scene in the WGN-TV studio when the "Guardians of Your Sleep" program was presented. The cast of actors — (left to right in picture above right) Drs.



Max S. Sadove, Robert Foulke, Adolph Walker, May Samuelson, R.N., Dr. James H. Cross and Edward Pelikan, the patient, a senior student in pharmacology.

transfusion. Mr. Edward Pelikan, senior student in pharmacology, played the part of the patient, simulating perfectly his role of being anesthetized. All are associated with the University of Illinois College of Medicine and the Veterans Administration at Hines. The two latter institutions cooperated with the Ohio Chemical Company in providing hospital equipment. Three large sets were constructed in the studio to give authenticity to the story. Television Forecast announced this telecast with the statement "What is perhaps the most complicated and realistic setting ever constructed for a television show."

The weekly health telecasts are developed by the Educational Committee of the Illinois State Medical Society in cooperation with WGN-TV.

Lectures Arranged Through the Education Committee:

Edward J. Brophy, Chicago, Libby School PTA in Chicago, September 14, Health of the School Child.

Adrian D. M. Kraus, Chicago, Calumet City Health Center in Calumet City, September 15, Behavior Problems of the Young Child.

Elmer E. Swanson, Chicago, Sunday Evening Group in Chicago, September 25, on Superstitions About Health.

Robert Hagan, Chicago, Millard Avenue Junior Woman's Club in Chicago, October 19, on Child Health—Behavior Problems.

Ben Park, producer, It's Your Life, Chicago Industrial Health Association, Woman's Auxiliary, West Side Branch, Chicago Medical Society, October 21, on "It's Your Life."

Philip B. Marquardt, Wheaton, Primary-Junior Mothers Club in La Grange, October 17, Growing Old Gracefully.

Lectures Arranged Through the Scientific Service Committee:

Philip Thorek, Chicago, Sangamon County Medical Society in Springfield, on Portal Hypertension, illustrated.

Aaron E. Kanter, Chicago, Bureau County Medi-

cal Society in Spring Valley, Office Gynecology and Use and Abuse of Hormonal Treatment in Gynecology.

L. Martin Hardy, Chicago, Fulton County Medical Society in Canton, October 13, on Recognition and Management of Malformations of the Alimentary Tract in Infants and Children, illustrated.

Philip Thorek, La Salle County Medical Society in La Salle, October 13, Surgery of the Colon.

Leo Kaplan, Chicago, Iroquois County Medical Society in Watseka, on Psychosomatic Medicine.

Guy V. Pontius, Chicago, Macon County Medical Society in Decatur, October 18, on Present Status of Gastric Surgery.

Willard O. Thompson, Chicago, Effingham County Medical Society in Effingham, October 20, on Female Endocrinology.

Paul H. Holinger, Chicago, DeKalb County Medical Society in DeKalb, October 25, on Foreign Bodies in the Air and Food Passages," illustrated.

Carlo Scuderi, Chicago, McDonough County Medical Society in Macomb, October 28, on Common Fracture Problems in General Practice.

Arthur J. Atkinson, Chicago, St. Clair County Medical Society in East St. Louis, November 3, on Management of Peptic Ulcer.

Conference Arranged Through Postgraduate Education Committee:

For the first time, the Sangamon County Medical Society will act as host to a Postgraduate Conference in the Fifth Councilor District. The session will be held at the Elks Club, Springfield, November 3. Following a noon luncheon, the program will open with a discussion on "Dizziness" by Paul Campbell, Chicago. Other participants will include Aaron Arkin, Chicago, on "Nephritis"; Percy Hopkins, Chicago, on "Public Relations of the State Medical Society"; David Markson, Symptomatic Treatment of Arthritis"; J. Peerman Nesselrod and Jay M. Garner, Evanston, on "Ano-Rectal Disease." The evening speaker will be Arkell Vaughn, Chicago, on "Surgical Lesions of the Large Intestines."

The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

Harold M. Camp, EDITOR.

Theodore R. Van Dellen, ASSOCIATE EDITOR.

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Vol. 96, No. 4



October, 1949

THE SECOND SPEAKERS' TRAINING CONFERENCE

Last February, the Illinois State Medical Society held a Speakers' Training Conference in Chicago which was well attended and was highly popular. As a result of this conference, many additional speakers were added to the list of speakers willing to talk before lay groups on Compulsory Health Insurance. Following this conference, many additional names were added to the list and hundreds of talks were scheduled throughout the state.

The Council authorized another conference which was held at the LaSalle Hotel, Chicago, on Sunday, September 11. More than 200 were present throughout the entire session and a most interesting program was presented. Percy E. Hopkins as chairman of the Committee on Medical Service and Public Relations gave the address of welcome, telling of the purpose for calling this second conference, and urging all present to remain for the entire session and take notes so that they might be able to ask questions at the proper scheduled time.

Walter Stevenson, President of the State Society made a few remarks then presided during the conference. Hon. L. C. Arends, Representative in Congress from the 17th District of Illinois, talked on the Menace of Coming Months. Congressman Arends made a fine talk which we

will publish in an early issue of the Illinois Medical Journal. He stated that no matter what the Washington planners say, the proposals for socialized medicine now before Congress "seek the nationalization of American medicine down to last bottle of aspirin".

Dr. R. B. Robins, Camden, Arkansas, who is Democratic National Committeeman from Arkansas, and a member of the A. M. A. Co-ordinating Committee, gave a very interesting discussion of what is going on in Washington, and discussed some of the things the A. M. A. has been doing in recent months. He stated that more than 1,500 organizations have pledged support to the medical profession's campaign against a compulsory health program.

Edwin S. Hamilton, Kankakee, Secretary of the A. M. A. Board of Trustees and likewise a member of the Co-ordinating Committee, likewise told of some of the things the A. M. A. has been doing, and also of the splendid cooperation which has been given by the affiliated state and territorial medical societies. He referred to the work of the National Education Campaign under the direction of Whitaker and Baxter, giving information of much interest to all present at the conference.

Rev. Michael I. English, S. J., Regent, Stritch College of Medicine, of Loyola University, Chicago gave a most interesting talk on medical ed-

ucation in the United States, and the increasing responsibilities of the medical schools. He told of the problems likewise, in hospital administration, and envisaged the effects on both the medical schools and hospitals under a compulsory health insurance plan, which has not worked out to the best advantage of the citizens in any country where such a plan has been in operation. He referred to recent developments in medicine, most of which were developed in this country where up to now, research has not been subsidized.

James H. Keith, D. M. D., and William E. Mayer, D. D. S., told of the cooperation on the part of the Illinois State Dental Society, whose problems are identical with those of the medical profession. Some interesting pamphlets distributed by this organization were handed out to those registering at the conference.

Mrs. E. M. Egan, President, Woman's Auxiliary to the Illinois State Medical Society told briefly of the desire of her group to cooperate in every way possible with the State Medical Society, and they are always awaiting further orders. She had quite a group of officers and other officials of the Auxiliary at this Conference.

Don Compton, Chairman, Speaker's Bureau, National Association of Accident and Health Underwriters told of the activities of this group in the present effort to oppose in every way possible, the enactment of legislation to develop a compulsory health insurance plan. He believed there is a place for insurance companies and service plans, and that all must work constantly to get more American people insured against the hazards of illness or disabling accidents.

E. P. Lichty, Executive Director, Blue Shield and Blue Cross, and E. E. Salisbury, Executive Director, Chicago Hospital Council told of the growth and functions of their respective organizations, both of which are unalterably opposed to a government medical care program.

Following the complimentary luncheon, Dr. Warren H. Cole told of the program for Chicago, he being Chairman, Committee on Medical Service, of the Chicago Medical Society.

James C. Leary, Director of Public Relations for the Illinois State Medical Society had as his subject, Who and How in County Programs, and he told of the present efforts of this Society to get to the grass roots in our own educational program. He also told of the cooperation with the

National Educational Program, and close relationship with Whitaker and Baxter.

The last speaker on the program, was J. Manley Phelps, teacher of speech, Chicago, whose subject was Telling Your Story Effectively. Mr. Phelps gave much interesting information to speakers, illustrating many of the points in showing what constitutes a good talk. Mimeographed copies of many more pertinent points on speaking properly, were handed out to all registrants at the conference. This was a highly instructive talk which was greatly appreciated by all present.

A question and answer period followed, and the meeting adjourned at 4.30 P. M. With more than 200 present, there were official representatives from a number of other states, such as Wisconsin, Michigan, Tennessee and Iowa. We hope to have available soon for all those who registered at the conference, and others who desire them, copies of the talks given by Congressman Arends, Dr. R. B. Robbins, and by Father English.

Again it was the general opinion of all present, that this was a well worth while conference, and one that was greatly appreciated.

IT'S YOUR MOVE DOCTOR!

The English physicians lost their battle against Socialized Medicine because they were too polite to fight. This inertia proved a costly blunder as most of the British physicians now admit. A stiffer fight may have prevented the chaotic conditions now existing and lightened the taxes not only here but also in the British Isles.

State Medicine strictly is a political battle. Most physicians are against it but to date only a handful have done anything about it. A campaign of this nature requires more than all the Whitaker and Baxters in the country; it requires the combined cooperation of us all. The campaign requires the individual efforts of every American physician. The battle will not be won in Washington but by convincing patients and friends at home that State Medicine is bad medicine for the country. To do this every physician must know the facts, pro and con, as well as he knows the symptoms of appendicitis. It is the grass root strategy of campaigning in the local community that "brings home the bacon."

Many physicians think that they are too big to resort to grass root politics; others let it be

known that they are so absorbed in the practice of good medicine that they cannot be bothered. We admire everyone who has the welfare of the public at heart but a new variable has been added to alter the picture. In our opinion, State Medicine lowers the standard of medical care and in this respect should stimulate the most conscientious physician to remove his gloves and get in and pitch. Nowadays a physician must be more than a good doctor if he wants to remain a free doctor.

We live in a free country but actually our fate rests in the hands of 435 congressmen and 96 senators. In other words, if we want the politicians to be interested in our cause, we must be interested in theirs. It has been reported that in one city approximately one hundred physicians were not registered and could not vote if they wanted to. Inertia was also evident in the 1948 campaign. A plea for campaign money was sent by a republican organization to physicians in a certain county in Illinois. Not one of them responded even though it meant sending a loyal supporter to Congress. What would you think if you were a congressman and were asked to help a cause in which the constituents involved showed absolutely no interest? In the 1950 elections let us remember that it is easier to settle issues at the polls than in Congress at a later date.

HONORING A FAITHFUL PHYSICIAN

It is generally recognized that the proper time to honor an outstanding citizen is when he is alive and capable of realizing that his friends are desirous of paying their tribute for his activities.

On Tuesday evening, August 30, some 200 friends of John W. Ovitz Sr., M. D., who has practiced in Sycamore for more than thirty years, met at the Country Club in DeKalb to show their appreciation for his many services over a period of three decades. In addition to a large number of members of the medical profession, there were many others from that community present, representing many business and professional groups. The function was arranged by the Medical Staff of the Sycamore Municipal Hospital, and the first greeting was extended by Emery J. Fenwick, M. D., Chief of Staff.

Following a fine dinner, General Cassius Poust was introduced as master of ceremonies. Doctor

Ovitz being one of those physicians with one or more hobbies, has long been interested in the breeding of fine cattle, and has served as president of the Brown Swiss Cattle Breeder's Association. The Secretary of this Association was present, and gave the greetings from the Association. He handed a check to Doctor Ovitz for the enlargement program of the Community Hospital.

Chief Justice William J. Fulton of the Illinois Supreme Court told of the standing of Doctor Ovitz in Sycamore and surrounding territory, and extended the greetings of the community as a whole to Doctor Ovitz on this occasion. Professional groups were represented on the program by Harold J. Trapp, M. D., as a staff member of the Sycamore Municipal Hospital, and by Paul W. Carney, M. D., president of the DeKalb County Medical Society.

Walter Stevenson, M. D., president of the Illinois State Medical Society, officially represented this organization on the program and paid his respects to Doctor Ovitz, and congratulated the community for having a man of his ability practicing there.

The speaker of the evening was Hon. Noah M. Mason, member of Congress from the district, who gave a most interesting talk on what is going on in Washington. Part of this fine talk was recorded to be used as a rebroadcast by a local radio station. The Congressman told of the constant efforts in Washington to develop a compulsory health insurance plan, and he gave some highly instructive and interesting statistics which we hope to publish in the near future.

Doctor Ovitz, in his unassuming manner, thanked his many friends for gathering together to honor him, and gave the impression that he had merely done his duty in accordance with precedents established long ago, and in keeping with the teaching of his professors at Northwestern University Medical School, from which institution he was graduated in 1909. Although long interested in the breeding of fine cattle, he wanted it understood that he was an ardent follower of Isaac Walton, and had spent many hours fishing in various parts of the country. He too, firmly believes that every business and professional man should have a hobby, and likewise stressed the importance of occasional vacations.

The expression seemed quite general at this dinner meeting that such an event was a justifiable tribute to an outstanding man in the community, and that it could not happen in countries where medical care is no longer practiced as a private enterprise.

DO YOU OR DON'T YOU?

1. — Do you want to be a political servant?
2. — Do you want to make house calls carrying a brief case instead of a grip?
3. — Do you want your patients to demand treatment, special diets and other remedies even though they do not need them?
4. — Do you want to spend half your time arguing with patients as to the advisability of renewing a disability certificate?

5. — Do you want to practice medicine without being thanked?

6. — Do you want to be forced to spend so much time with neurotics that you cannot treat those who are in dire need of care?

7. — Do you want to be so rushed that you are forced to practice second-class medicine?

8. — Do you want to consult an eight-hundred page looseleaf book each day to familiarize yourself with all the changes in regulations in medical care which the Government has deemed necessary?

9. — Do you want to lower your standard of living?

If not, cooperate with your Medical Society by paying the extra assessment and campaign against Socialized Medicine in your local community.

HEART INFECTION TAKES HEAVY TOLL IN DISABILITY

Despite the success doctors have achieved in curing infection of the lining of the heart by administering penicillin, patients who recover from the disease may be disabled.

One out of three patients in a group of 18 reported in the Sept. 10 Journal of the American Medical Association, were left with a progressive heart condition, although penicillin cleared up the active infection.

Subacute bacterial endocarditis, inflammation of the membrane which lines the heart, has been until recently an almost uniformly fatal disease. In a number of cases it follows rheumatic fever, the article points out.

With the advent of penicillin therapy, however, doctors have been able to cure many patients of the active heart infection. But since the membrane which lines the heart muscle covers the valves of

the heart as well as its inner walls, endocarditis may leave scars which cause narrowing of one or more valves or interfere with their proper closing.

All of the group of patients reported by Drs. Sherman R. Kaplan, Ray H. Rosenman, Louis N. Katz, and William A. Brams, of Michael Reese Hospital, Chicago, were followed from 25 to 61 months after their heart infection was cured by penicillin therapy.

Six of the patients had progressive heart disability since the onset of subacute bacterial endocarditis. In three of these the disability led to death from heart failure. Twelve showed no progression of their heart condition, the doctors say.

The great majority of patients with early minimal pulmonary tuberculosis have no symptoms. At present, the only method available for detection of the truly incipient tuberculous lesion is routine chest X-ray examination at periodic intervals. David Reisner, *Am. Rev. Tuberc.*, March, 1948.

MEDICAL ECONOMICS

The Medical Economics Committee. Chauncey C. Maher, Chmn., Hubert L. Allen, Emmet S. Bay, Edwin F. Baker, Carroll Birch, Thomas C. Browning, Roland R. Cross, James Graham, George Halperin, Edwin S. Hamilton, Ford K. Hick, Edwin F. Hirsch, May McDonald Milligan, Marie Wessels, Walter M. Whitaker, Holland Williamson.



Medicolegal Testimony

The scope of medicolegal testimony has broadened rapidly since the alienists first attracted widespread attention in connection with sensational murder trials. Workmen's Compensation Laws and the increase in the number of personal injury suits arising from automobile accidents have been chiefly responsible. In addition it can be said that since World War II, there is scarcely a field of human endeavor in which medical advice is not required. An added responsibility has been placed upon the doctor and although his duties have been discharged satisfactorily, for the most part, there has been considerable criticism relative to certain phases of medicolegal testimony. It is natural enough that the criticism has frequently come from the direction of lawyers and litigants whose cases were lost. The doctor on the opposite side has also become critical at times because of testimony by a colleague with whom he did not agree, or whose sincerity, even honesty seemed dubious.

The objections have not been entirely vocal. Attempts have been made by joint action of the legal and medical professions to overcome what has been considered abuses of the privileges given

to the doctor in the court room. Transcripts of the proceedings of these groups indicate that attention had been directed chiefly to the irregular testimony of the so-called professional witness and to cases of actual perjury.

Among the remedies proposed the so-called Minnesota Plan has received the greatest attention and where action has been taken by medical and legal societies it has been essentially in accordance with that plan. Briefly, it consists of nothing more than an arrangement by which doctors and lawyers report to a special committee within their societies any case of unethical procedure in the courts by their members. Penalties are not defined and but very little information is available about the results obtained beyond the assertion that improvement in the quality of medical testimony has been observed in Minnesota.

Action in cases of perjury remains of course in the jurisdiction of the courts and where medical testimony is involved there is possibly nothing more difficult to prosecute than perjury. Difference of opinion is permissible and that is usually all that an investigation can reveal.

The laws nevertheless function well as a deterrent to perjury and it is understandable that any form of action by the professional societies would militate against any form of abuse. The effect of such action is least noticable among those members of the medical profession who devote much time to the witness stand and who have become immune to criticism. These men are the chief target wherever objection to our present system of medicolegal testimony arises and it is necessary that the importance of their activities be appraised.

There are possibly no more than half a dozen medical men in the Chicago area who specialize in the examination of plaintiffs and in testimony in their behalf. A greater number are engaged as medicolegal advisers to large corporations where their duties are concerned chiefly with defense. The majority of both of these groups are members of the American Medical Association and the local societies. Otherwise their qualifications are subject to great variation. That some of these whose qualifications are below average are able to qualify as experts is the result of peculiarities of legal procedure. They are experts only in the language of the court where definitions are not those in professional practice. It is seldom true that their influence is equivalent to that of the highly trained specialists and when the contrary is the case poor management by the opposing attorney is ordinarily evident. From a technical viewpoint they recite truths more often than falsehoods and that they succeed in their testimony is frequently because they are able to reflect the desires of the attorneys who engage them. The economic importance of such testimony is possibly not as great as the occasional unwarranted awards might indicate and although there is need for reform, it is not entirely within these groups that it should be applied.

Medical testimony experts the greatest influence when it is given by members of the medical profession who are thoroughly qualified by training as well as by close relationship with the case. Among these are the attending doctor, consultants, and only occasionally experts called by the court to clarify in an unbiased manner some matter in dispute. It is fortunate that among these men there is usually a high regard for truth but unfortunately that their services

are the most difficult to obtain. Moreover, there are those among them who are unwary and sensitive to the severity, and in exceptional cases, the abuse of cross questioning. They find themselves in the cross-fire of attorneys who have presented premises that are half-truths or are entirely opposite. They have been called to testify by one or the other of the attorneys and naturally a feeling of loyalty to that side is entertained. The methods of establishing truth in the court are not always those employed by the doctor and an incongruous situation is thus created. The scientist is still looking for the cause of cancer but in the courts the cause has been decided in specific cases and on numerous occasions chiefly by virtue of decision in the higher tribunals. The element of pity, protection of a substantial fee, knowledge of the firm financial position of insurance companies and other large corporations obstruct justice at times and are helpful influences on other occasions.

The doctor's desire to be fair can only be satisfied in his own mind and in minds of those who think as he does, and criticism arising under those circumstances is unavoidable. The problem does not have a general formula which can be used for its solution but the fact remains that legal procedures which have withstood the test of time are as effective as anything that can now be devised and it is our duty to abide by them. In his desire to satisfy the cause of justice—complicated though it might seem—the medical witness still has as his guide the oath which is administered as he takes the stand. He agrees to tell the truth and in so doing it is his duty to choose truths which do not defeat justice. He must be accurate and in the face of confusion or embarrassment must remember what he has said if contradiction of his own assertions is to be avoided. If a decision appears contrary to his own interest, it might be favorable from another viewpoint.

The increasing demands for indemnity are no different than the ever mounting desire for more public service. The latter is reflected in taxes and the former in insurance premiums which in the aggregate are a substantial burden to those members of society who pay their own way. The medical profession is a sizeable segment of that group—T. C. B.

STATE DEPARTMENT OF PUBLIC HEALTH



Interim Report on the Centralia Emergency Polio Center

Leonard M. Schuman, M.D.

**Acting Chief, Div. of Communicable Diseases
Springfield**

The 1949 polio season had its early and all too lavish premier in Centralia and Marion County. Within the first two weeks of July, fifteen cases were reported in this County of 48,000 population, with eleven of these occurring in the City of Centralia. Devoid of adequate hospital beds for isolation and with the facilities of East St. Louis and Springfield approaching capacity by polio admissions from southern and central Illinois, Centralia soon found itself unable to cope with its local outbreak. The city health officer, Dr. G. N. Welch, and Mayor H. B. Blanchard appealed to the Illinois Department of Public Health for assistance in opening an isolation facility in the former quarters of the Sister Kenny Foundation Clinic. Their action was encouraged by local physicians and citizenry, with the result that a conference was held in Centralia on July 19, 1949, at which representa-

tives of the State Department of Public Health, the University of Illinois' Division of Services for Crippled Children, the City of Centralia and the National Foundation for Infantile Paralysis were present. The Department of Public Health, upon appraising the physical facilities of the former Kenny Clinic and with the responsibilities of the respective agencies agreed upon, decided to open the facility immediately as an emergency polio isolation and care center for cases of the area.

The facility was provided rent-free by the Huddleson Home of the Baptist Church, which had planned to utilize the quarters as a children's home. Reverend John Winter was asked to stay on as Superintendent of the Center. Equipment formerly used by the Sister Kenny Foundation was utilized with the sanction of that Foundation. The Division of Services for Crippled

Children, under the direction of Dr. Herbert Kobes, assumed responsibility for per diem reimbursement for patients hospitalized. The local chapter and State office of the National Foundation for Infantile Paralysis provided transportation for patients to and from the Center, obtained much needed equipment, authorized the recruitment of nurses through the American Red Cross, secured the services of physiotherapists from Northwestern University and pediatric and orthopedic residents from the University of Illinois. The City of Centralia served as the official fiscal agent in this undertaking.

The Emergency Center filled rapidly within the first week of operation. Patients with positive diagnoses only were admitted and the facility served as a diagnostic center at the request of the physicians of the area. Only private physician referrals were accepted.

In the first week of operation, local nurses, nurses aides, hot-packers, kitchen staff and maintenance men were recruited. Prior to the arrival of Dr. Herbert Mazur, pediatrician of St. Louis and disciple of Dr. Alexis Hartman, who was to serve as Medical Director, the medical staff consisted of Dr. Norman J. Rose, District Health Superintendent from Highland and Dr. Leonard M. Schuman, Acting Chief of the Division of Communicable Diseases of the State Department of Public Health. Dr. Felix Tornabene, District Health Superintendent from Aurora, also served for a short period of time.

The Division of Services for Crippled Children and the National Foundation for Infantile Paralysis obtained the services of the polio consultation team from Northwestern University, represented by Dr. E. D. Houser, orthopedic surgeon and Dr. Arthur Abt, pediatrician. This

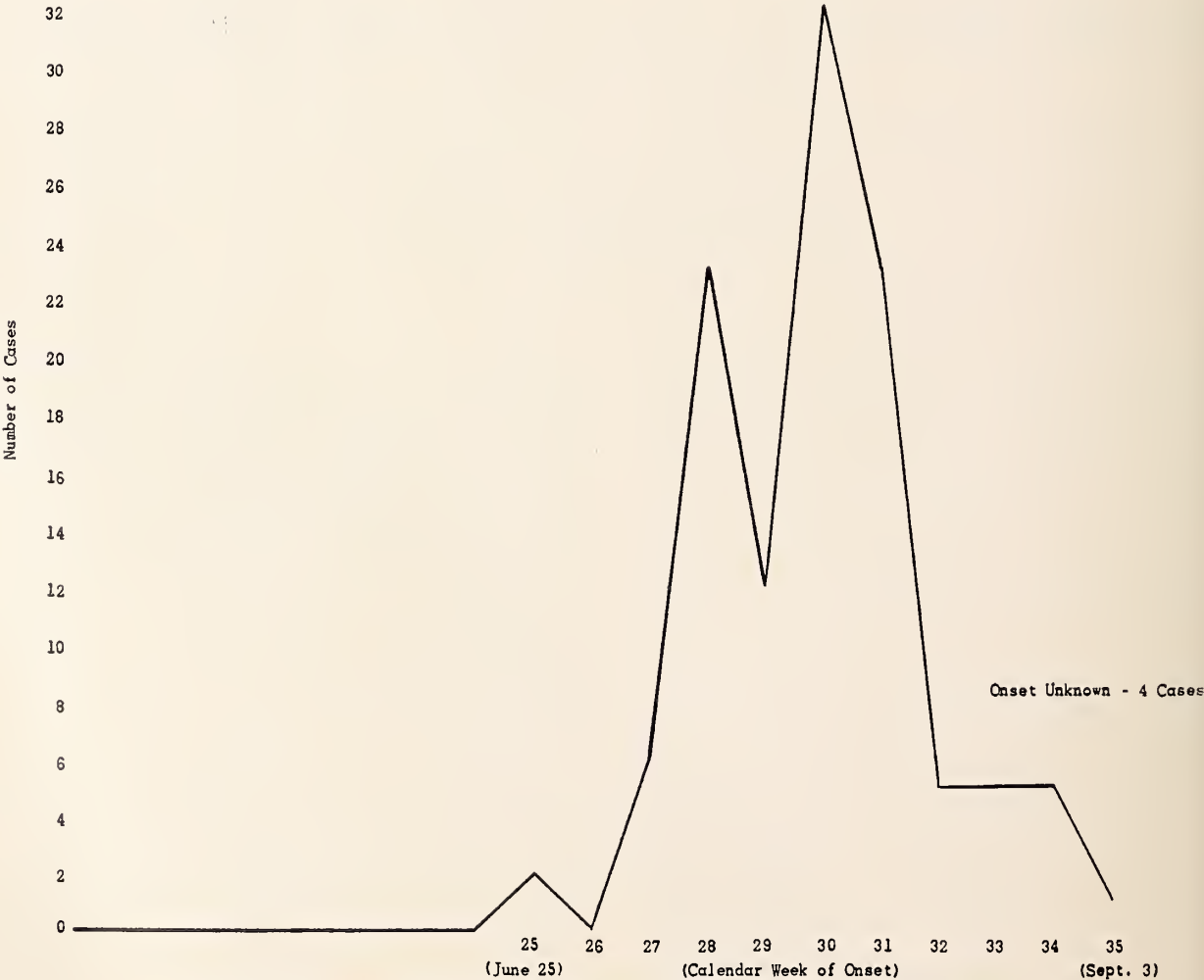


Figure 1. Poliomyelitis, by week of onset, Marion County, Illinois, 1949.

team appraised the personnel and equipment needs of the Institution and provided the temporary services of Dr. Cummins, orthopedic resident, as well as those of three nurse physiotherapists. Dr. Felix Simon of the Lawrence-Wabash County Health Department was recruited as Assistant Medical Director and Admissions Officer. Nursing care coordination was achieved through the excellent services of Sister Mary Leliose, Mother Superior of St. Mary's Hospital in Centralia.

Early in August, the case load exceeded capacity (36) and reached a peak of forty-two patients, despite the discharge of fully recovered cases and the referral to convalescent centers of cases with residual paralysis. Further personnel was required at this stage of operation when the services of Drs. Kurt Glaser and Jack Markowitz, pediatricians, and Dr. Howard Schneider, orthopedic surgeon were obtained from the University of Illinois through the National Foundation for Infantile Paralysis. By this time the United States Air Force at Scott Field, who had been flying respirators and oxygen tents to the Center, supplied thirteen medical corpsmen for general ward duties, as well as three nurses. At peak load, the Center required the services of five resident physicians, three medical students, the thirteen medical corpsmen, forty-three nurses, twenty-two local nurses aides and three nurse-physiotherapists. The forty-three nurses represented eight local recruits, five American Red Cross recruits, five from county health departments, three Air Force nurses and twenty-two nurses from the consultant and supervisory staff of the Illinois Department of Public Health.

The large nursing staff was necessitated by the great number of critically ill patients in this outbreak. At one time, five respirators were in operation, requiring constant special duty nursing. The subsequent unprecedented increase in poliomyelitis cases in downstate Illinois overtaxed the facilities at East St. Lous and Springfield so that overflow patients from the Marion County area as well as from the southeastern counties of Illinois had to be referred to Evansville, Indiana facilities.

With the break in the peak early in September for most of the areas of inordinately increased incidence, acute and convalescent beds became relatively more available in the perma-

TABLE 1
POLIOMYELITIS, MARION COUNTY,
BY AGE & SEX
January 1 — September 8, 1949

Age Group	Male	Female	Total
Under 1 yr.	3	2	5
1- 4	27	16	43
5- 9	17	8	25
10-14	4	6	10
15-19	8	1	9
20-24	2	7	9
25-29	3	7	10
30-34	0	1	1
35-39	0	1	1
40-44	1	0	1
Over 45	0	0	0
Age Unknown	0	4	4
Total	65	53	118

nent facilities of Illinois, and with but sporadic cases occurring in Marion County at the time, admissions to the Centralia Center ceased September 6 and the facility closed September 10.

In the period July 19 to September 10, 1949, 237 patients were examined at the Center, 148 patients were admitted with diagnoses of poliomyelitis and 14 diagnosed cases were referred to other hospitals. Among the 148 cases treated at the Center, 9 died — a case-fatality rate of 6.1% for the Institution. This is significantly below the provisional case-fatality rate of 7.6% for the State as a whole through September 7, 1949. During this period, blood samples and feces specimens were obtained from patients for special virus studies, results of which will be forthcoming at a later date.

Though it is too early to appraise the severity of the Marion County outbreak because of the need for follow-up for determination of residual paralysis as well as to evaluate the significance of special epidemiologic studies now in progress, it may be of interest to analyze the morbidity data on a preliminary basis. Though many patients from counties other than Marion were treated at the Center, the Marion County outbreak, by its magnitude (118 cases or 226.9 cases/100,000 population), is of immediate import.

Figure 1 portrays the incidence of poliomyelitis in Marion County by week of onset. It will be noted that the first cases for the year occurred as early as the 25th calendar week (ending June 25). Following this, the rise was immediate and

intense so that by the 30th calendar week (ending July 30), when the peak was reached, 75 cases had occurred. This was followed by a sharp decline with but sporadic cases occurring during the 32nd to 35th weeks inclusive. Thus it can be seen that this outbreak began and the peak reached approximately 3 weeks earlier than the experience for downstate Illinois as a whole.

The 118 cases of poliomyelitis occurring in Marion County between June 24th and September 8, 1949 have been distributed according to

age and sex in Table 1. It may be noted that 62% of the cases were patients under ten years of age and 70% were under 15 years of age. Furthermore, the male incidence showed the usual slight excess over the female, (55 males for every 45 females).

Further statistical analyses as to urbanity or rurality, diagnostic types of the disease, severity and outcome as well as contact investigations will be forthcoming in future publications.

SYNTHETIC DRUG AIDS SHAKING PALSY VICTIMS

Successful use of an almost entirely nontoxic drug to alleviate tremor and other symptoms of shaking palsy is reported in the August 27 Journal of the American Medical Association.

The synthetic compound, called Artane, counteracts constriction of muscles and other effects produced by certain nerves. Artane affords as much relief to patients with the disease as does any other available drug, according to Drs. Lewis J. Doshay and Kate Constable, of Columbia University and Neurological Institute, New York.

Artane is expected to be particularly useful in treating long-standing cases of the disease and cases complicated by high blood pressure and heart and kidney disorders, the article indicates.

"The results of clinical studies in a series of 117 patients treated with this agent establish its great usefulness against Parkinsonian disorders and its remarkable freedom from disturbing side reactions," the doctors point out.

"Besides," they say, "it has an unusual cerebral-stimulating action, which is particularly effective in combating the depression and inertia prevalent among these patients. It is safe for use by the young and the old, the ambulatory and the infirm, the hypertensive, the cardiac, and the nephritic.

"It recommends itself as the drug of choice in arteriosclerotic and idiopathic [spontaneous] cases, and should be tried regularly in postencephalitic cases in which other forms of medication prove disturbing or ineffectual."

Exposure to fumes and gases could not be proved to favor the onset of tuberculosis; neither lead absorption and intoxication, nor mill dust and foundry employment are associated with the development of tuberculosis. High temperatures and humidity are without significant influence upon tuberculosis, nor are any theoretical reasons advanced to the effect that they should be. Radiant heat in the steel industry causes no tuberculosis in those exposed. Rutherford T. Johnstone, *Am. Rev. Tuberc.*, Oct., 1948.

CORRESPONDENCE



YOUR MENTAL HOSPITALS "ALCOHOLICS"

Six male alcoholics were admitted to the Illinois State Mental Hospitals for every female alcoholic admitted during 1948.

A recent statistical study¹ was made of the annual admissions and of the resident population of the alcoholics in the nine State institutions. Contrary to some reports, the resident population of alcoholics with psychoses (patients remaining in the institutions) has not increased as shown by Table 1.

During the twelve month period there were over 2,900 patients admitted for alcoholism, one third suffering from a psychosis and two-thirds being without a psychosis or not insane. Many of these patients entered the institutions, received treatment, improved or recovered, and returned to their home or community.

There was no age limit for alcoholics, as the list varied from seventeen years to over eighty-five years of age. The largest number of admissions for both sexes was from forty to sixty years of age.

It is extremely interesting to analyze the admissions according to race. Topping the groups of those differentiated by racial descent are the British (English, Irish, Scotch and Canadian),

the Slavonic (Russian, Polish and Czech), and the Negro. At the bottom of the group are the Hebrew (9 out of 2,900 admissions) and the Spanish, French and Italian (33 out of 2,900 ad-

TABLE 1
Resident Patients in
Illinois State Mental Hospitals

Year	All Mental Disorders	Alcoholic Psychoses	
	Total No.	Total No.	Percentage
1925	19,968	577	2.9
1930	22,655	796	3.2
1935	26,572	893	3.3
1940	32,037	1,459	4.5
1948	34,067	1,211	3.6

missions). It is difficult to explain why certain racial groups have a higher tendency to alcoholism and alcoholic psychoses. The groups at the bottom of the list do drink alcoholic beverages. They do use beverages which are low in alcoholic content, namely, the wines.

According to the survey the rate of alcoholism was higher in the more educated patients. The number of high school and college trained individuals in Table 2 is high when one remembers that they form only a limited percentage of the total population.

As mentioned previously, the admission of men was six to one as compared to women. Analysis

¹Prepared by the Research and Statistical Division, Illinois Department of Public Welfare.

TABLE 2.
Degree of Education of Alcoholic Patients
Admitted to the State Mental Hospitals

Education	Total	No.
Illiterate	22	
Read and Write	80	
Common School		
1st to 4th Grade (incl.)	119	
5th to 7th Grade (incl.)	329	
8th Grade	813	
Unknown	23	1,284
High School		803
College		188
Not Reported		594
Total		2,971

of marital status revealed that admissions were approximately equal for the (a) single, (b) married, and (c) divorced or separated male patients. The admissions of single women were very low compared to admissions for alcoholism in the married or divorced and separated groups of women. If the married group would include those who were married at the time of admission to the hospital or were previously married (the widowed, divorced or separated groups), it would greatly exceed the single group. If one recalls that the larger number of alcoholics admitted were in the forty to sixty year range, then one would expect the number of married patients to be higher than the single.

G. A. Wiltrakis, M.D.
Deputy Director
Medical and Surgical Service

TWENTY CLINICS FOR CRIPPLED CHILDREN LISTED FOR NOVEMBER

Doctor Herbert R. Kobes of the University of Illinois Division of Services for Crippled Children, has released the November schedule of clinics for physically handicapped children. The Division will conduct 15 general clinics providing diagnostic orthopedic, pediatric, speech and hearing services. There will be four clinics for children with rheumatic fever and one for cerebral palsied children.

Several clinics were canceled during July because of the prevalence of poliomyelitis. However, 615 children were examined at the general clinics, 45 at the rheumatic fever clinics and

11 at the cerebral palsy clinic. Attendance at the latter type of clinic is by invitation only.

Local medical and health organization, both public and private, cooperate with the Division in providing this clinic service to Illinois' thousands of physically handicapped children. The examining clinicians are selected from private physicians who are certified Board members. Any private physician may refer or bring to a convenient clinic those children for whom he may want examinations or may want to receive consultative services.

The November clinics are:

- November 1 — Casey, High School
- November 2 — Joliet, Will Co. TB Sanitarium
- November 3 — Hinsdale, Hinsdale Sanitarium
- November 8 — Peoria, St. Francis Hospital
- November 8 — E. St. Louis, St. Mary's Hospital
- November 9 — Evergreen Park, Little Co. of Mary
- November 10 — DuQuoin, Marshall-Browning Hospital
- November 10 — Elmhurst Rheumatic Fever, Elmhurst Community Hospital
- November 10 — Springfield, St. John's Hospital
- November 11 — Chicago Heights Rheumatic Fever, St. James Hospital
- November 14 — Shelbyville, Veteran's Center
- November 16 — Sterling Public Hospital
- November 16 — Alton, Alton Memorial Hospital
- November 17 — Rockford, St. Anthony's Hospital
- November 17 — Bloomington, St. Joseph's Hospital
- November 18 — Chicago Heights Rheumatic Fever, St. James Hospital
- November 22 — Peoria, St. Francis Hospital
- November 22 — Pittsfield, Illini Community Hospital
- November 29 — Effingham Rheumatic Fever, St. Anthony's Hospital
- November 29 — Watseka, County Court House
- November 30 — Springfield Cerebral Palsy, St. John's Hospital

Children accepted for Division care are those with:

1. Orthopedic conditions including acute poliomyelitis
2. Rheumatic fever and heart disease
3. Conditions of the nervous system
4. Cerebral palsy
5. Congenital and acquired defects which respond to plastic surgery
6. Speech defects associated with organic conditions
7. Hearing loss and deafness
8. Epilepsy

Carrying on its program the Division works cooperatively with local medical societies, hospitals, Illinois Children's Hospital-School, civic and fraternal clubs, visiting nurse associations, local social and welfare agencies, local chapters of the National Foundation for Infantile Paralysis and other interested groups.

In all cases, the work of the Division is intended to extend and supplement—not supplant—activities of other agencies, either public or private, state or local, carried on in behalf of crippled children.

WHAT EVERY DOCTOR'S WIFE SHOULD KNOW

At our recent convention at Atlantic City all Auxiliary members were impressed with the stress all speakers—officers, chairmen and members of the Board of Trustees of the American Medical Association; put on the importance of our organization. American Medicine needs us NOW and those of us who are responsible for Organization work pledged our cooperation. I, as key organizer for the State of Illinois for the year 1949-1950, come to you with the hope of reaching every potential member. Illinois is composed of one hundred and two (102) counties twenty-four (24) of which are organized. We have twenty-three (23) members-at-large from nineteen (19) different counties which gives us representation in forty-three (43) of the one hundred and two counties. These figures are given to show the tremendous amount of organization work yet to be accomplished.

We wives of doctors believe we can materially assist in the work of our husbands by banding together to be instructed in medical matters of the day in which the general public is interested and then to disseminate the correct information

through the various social or civic groups with which we are affiliated. We have also found great differences of age and interests have often prevented us from knowing each other well. I realize, for I have used the same arguments myself, that women throughout the United States are over-organized and we have no time for anything more. But, coming down to brass-tacks, the maintenance of our husbands' profession is being openly challenged by many groups and in the Congress of the United States. Looking at it from this stand-point, what other study, civic or social group should rate priority? The following questions and answers about the Woman's Auxiliary to the Illinois State Medical Society may prove helpful in fulfilling our goal of "Every doctor's wife a member of the Auxiliary".

1. What is the Woman's Auxiliary to the Illinois State Medical Society? The Woman's Auxiliary to the Illinois State Medical Society is an organization of wives of members in good standing of the County Medical Societies throughout the State.
2. What are the objectives of a County Auxiliary?
 - a. To assist the County Medical Society in the advancement of prevention of disease.
 - b. To aid in securing better medical legislation.
 - c. To do such other supplemental work as shall be determined from time to time by the County Medical Society.
 - d. To endeavor by frequent meetings to secure knowledge of, and to disseminate the aims and educational program of organized medicine throughout the community.
 - e. To function as a component unit of the Auxiliary to the Illinois State Medical Society, and through it a part of the Auxiliary to the American Medical Association, and to further the interests thereof.
 - f. To contribute to the Benevolence Fund.
3. What are the purposes of the County Auxiliary?
 - a. Through its members to explain the objectives of the medical profession to lay organizations interested in health education.
 - b. To assist in the entertainment of all Illinois State Medical Society Conventions.
 - c. To promote acquaintanceship among physicians' families and thus foster better fellowship.

4. Is there a National organization?
Yes. The American Medical Association authorized the organization of the Woman's Auxiliary to the AMA in 1922.
5. Are there members-at-large in counties not organized?
Yes. There are members-at-large in nineteen counties.
6. How does the Auxiliary assist the Medical Society in legislative work?
 - a. By educating its membership to the knowledge of the problems that face the medical society.
 - b. By communicating with their State and National legislators.
 - c. By presenting authentic speakers on pertinent legislative topics before local organizations.
 - d. By distributing material authorized by the medical society.
7. How does the Woman's Auxiliary assist in Public Relations?
 - a. By acting as a liaison group between the medical society and the public, and by developing a spirit of understanding and good fellowship between the laity and the profession.
 - b. By taking part in the various local health drives and community projects with the permission of the medical society.
8. Does this Public Relations work supplement Society activity?
Yes. The work done by the Auxiliary carries with it the sanction of the medical society, thereby allowing the Society to be included in community projects that have to do with the positive features of the Health Programs of the AMA, State and County Medical Societies in which they otherwise might not be able to participate.
9. What other work does the County Auxiliary do in Public Relations?
 - a. Holds study groups on prepayment medical care plans.
 - b. Contributes to the benevolence fund.
 - c. Promotes sale of Hygeia.
 - d. Helps with the nurse recruitment program.
 - e. Arranges Health Education programs.
 - f. Sponsors legislative work as recommended by medical society.
10. Are Auxiliaries controlled by their County Medical Societies?
Yes. Through an Advisory Committee appointed by the President of the County Medical Society.
11. How is a new Auxiliary organized?
A motion to approve the organization of an auxiliary must first be approved by the County Medical Society.
An interested representative physician's wife acts as organization chairman. She contacts the State Councilor of the Auxiliary and the State Organization Chairman and requests their assistance in organizing the new auxiliary.
12. How is the first meeting arranged?
The State Organization Chairman and the State Councilor of that district assist the local group with further arrangements. These depend largely on the size of the new unit. The representative physician's wife issues invitations to the wives of their members to attend a meeting or tea for the purpose of organizing an auxiliary to the medical society. It is helpful to have your State Organization Chairman and State Councilor at the very first meeting to explain the aims and purposes of an auxiliary.
13. What is the next formal step?
The local organization chairman calls for a motion to organize an auxiliary to the county medical society with those present as charter members. She then appoints the nominating committee. The new unit sets a date for their next meeting at which election of officers takes place, or elects officers at this meeting.
14. What are the dues?
Each county decides for itself. Membership dues range from \$3 to \$7 as voted by the membership.
15. When are the dues payable?
Dues shall be payable on or before March 1st. of each year.
16. What are State Dues?
Each County forwards \$2.00 per capita for each member on the roll to the State Treasurer. She, in turn, forwards \$1.00 per capita for each member to the National Treasurer.
17. How does the county auxiliary use its money?

For the support of its organization, placement of Hygeia, contributions to benevolence fund and whatever they decided to sponsor.

18. How is the county represented at the State Convention?

Every County Auxiliary shall be entitled to one delegate for each twenty-five members or major fraction thereof.

19. Is the county auxiliary represented at the State Board meetings?

Yes. Each County president and president-elect are expected to attend the fall board meeting. She reports accomplishments and problems of her county.

20. Do State and National Auxiliaries maintain contact with the county Auxiliary?

Yes. Through the quarterly Bulletin of the Woman's Auxiliary to the American Medical Association.

a. Material is prepared and distributed by each state chairman for the guidance of local chairman.

b. By attendance at conventions and by personal visits of the president and state officers.

21. What does the physician's wife benefit from membership in the Auxiliary?

a. She benefits from taking her part in the promotion of harmony and good fellowship among the physicians' families in her community.

b. She benefits from assuming her responsibility in joining with the other physicians' wives in the United States in an organization assisting the medical profession in the solution of the problems confronting them.

c. She benefits in that her name on the roster and her financial support works for the aims and purposes of the Woman's Auxiliary to the American Medical Association throughout entire country.

Effie S. Sibilsky (Mrs. Carl E.)
100 N. Glenwood Ave.,
Peoria No. 5, Illinois

POSTGRADUATE COURSE ON URINARY TRACT DISORDERS

On November 17, 18, and 19 the Frank E. Bunts Institute and the Cleveland Clinic will present a continuation course for physicians on "Medical and Surgical Disorders of the Urinary Tract". Dr. Herman L. Kretschmer of Chicago

will give the evening address November 17 on "Clinical Significance of Hematuria". The other out-of-town guest speaker will be Dr. Louis Leiter of New York, who will speak on "Uremia" Saturday morning, November 19, and who will take part in the panel discussion closing the course.

Inquiries regarding the complete program and registration can be addressed to the Director of of Education, Frank E. Bunts Educational Institute, 2020 East Ninety-third Street, Cleveland 6, Ohio.

PRIZES FOR UROLOGICAL RESEARCH

The American Urological Association offers an annual award of \$1000.00 (first prize of \$500.00, second prize \$300.00 and third prize \$200.00) for essays on the result of some clinical or laboratory research in urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to residents in urology in recognized hospitals.

The first prize essay will appear on the program of the forth-coming meeting of the American Urological Association, to be held at the Hotel Statler, Washington, D. C., May 29—June 1, 1950.

For full particulars write the Secretary, Dr. Charles H. de T. Shivers, Boardwalk National Arcade Building, Atlantic City, N. J. Essays must be in his hands before February 20, 1950."

SEEKS ULCER DATA

To The Editor:—

The study of twins is of great value in providing information concerning the respective importance of hereditary predisposition and environmental influences in disease in man. The results of the use of this method have shown a hereditary predisposition to tuberculosis, diabetes, and tumor formation, and a high, medium or low intelligence quotient.

There is some *a priori* evidence showing an hereditary predisposition for peptic ulcer. Only six cases of the occurrence of peptic ulcer in the one or both of mono- or dizygous twins have been reported in the readily accessible literature. Since twins are born in 1 of 86 births and identical twins in 1 of 344 births and general inci-

dence of ulcer is from 5 to 10 per cent there should be plenty of material available.

I should like to ask physicians to cooperate in assembling such material by sending me cases in which (1) one or both twins develop peptic ulcer, (2) the site of the ulcer, (3) the age of onset of ulcer, (4) the type of twins (monovular or diovascular), (5) the sex of the twins,

(6) the date of birth of the twins, and (7) the number and age of the brothers and sisters and the absence or presence of ulcer in each.

A. C. Ivy, M. D.
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USE THE AMMUNITION FURNISHED YOU

If the medical profession of America values its personal freedom, each doctor must fight against passive acceptance of the "status quo." It is our duty to the American people, and to ourselves, to protect our system of free enterprise.

To do this, we must get the truth before the people.

The National Education Campaign of the American Medical Association has provided material which can be of tremendous value to us in our struggle to reject Compulsory Health Insurance.

Don't delay any longer. Fill out the coupon below and put this excellent material to work for our cause.

Please check items and note quantity desired.

Then mail to:

Dr. Harold M. Camp, Secretary
Illinois State Medical Society
Monmouth, Illinois

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ORIGINAL ARTICLES



A Dean Looks at Medical Education and Practice

Edward L. Turner, M.D.
Dean, School of Medicine
University of Washington
Seattle, Washington

In April of 1948 an interesting and significant conference on "Education for Professional Responsibility" was held at Buck Hill Falls, Pennsylvania. Leaders in education in the fields of divinity, law, medicine, engineering and business met to exchange experiences and to discuss the objectives of professional education, the content and methods of professional instruction, and the humanistic and social education needed as preparation for professional responsibility and citizenship. In his introduction to the little volume reporting the proceedings of this interesting inter-professional conference Professor Elliott Smith (1) makes the following statement:

"If professional men are to play their part in preserving the freedom and improving the character of our democracy, they must continue

to learn throughout their lives from study and experience the changing character of the problems which confront Society and the changing means available for solving them. Only by so doing can their influence on public action be well informed and free from bondage to propaganda. They must learn how to apply the power of mind which they develop in professional study and work to dealing with the complex problems that confront our government. Only by thus giving of their highest powers to the public good can they maintain the effective popular control that alone separates democratic bureaucracy from dictatorship. Finally, they must do all this in spite of the engrossing demands of professional work."

This statement seems to me to be of particular significance today, for we are living in a time when the engrossing demands of the task of learning to be a physician and then actually

Oration in Medicine, 109th Annual Meeting of the
Illinois State Medical Society, May 16, 1949.

being a good physician are greater than ever before. At the same time we are in the midst of a situation where it is imperative that our profession give equally serious thought to this complex social upheaval in which we find ourselves living, and that we be able to take an intelligent role individually and collectively in helping to solve some of the problems that face us as a nation. We as physicians have found ourselves peculiarly unprepared for the role of leadership in certain aspects of this changing world where the need for farsighted leadership has been greater than ever before.

For too long we have gone blithely on our way, endeavoring to be physicians, doing our work well and conscientiously, but almost oblivious to the current of political and economic struggle between the two great ideologies, the free enterprise of capitalism and the planned economy of stateism, that has been going on around us. True enough there have been some of our professional leaders and many individuals within our ranks who have been aware from the beginning of the changing social order and the new demands arising with it. But instead of carefully analyzing the situation and endeavoring to meet it with intelligent, foresighted plans there has been a tendency to assume the attitude that "*what has been medicine's part of the picture must not be changed.*" We have felt the pulses of our patients and endeavored to interpret them in our professional duties, but we have failed to utilize the obvious pulse changes of Society in an effort to make a cleancut diagnosis, to utilize adequate prophylaxis or to initiate a specific cure.

As physicians we are all familiar with the fact that specific prophylaxis in ample time prevents infection, that application of proper therapeutic procedures when a diagnosis is made can result in cure and that failure to initiate proper therapy soon enough may cost a life or leave a permanently damaged patient. As far as the role of medicine as a profession is concerned in this changing social pattern we certainly did not use adequate prophylaxis, we did not make a correct diagnosis, we have not carried out an adequate differential diagnostic survey that lead to conclusions early enough to avoid complications. Our attempts at therapy when the provisional diagnosis was made were too long on the

basis of empiricism rather than on that of sound scientific observation.

As I survey this present struggle in our nation between capitalism and stateism, as I look at the amazing accomplishments of medicine under the system of free enterprise that has made our country great, I cannot help but be interested as to why and how it has been possible for us as a profession to have reached the present status without better preparation to meet it. Apparently the herd instinct that makes men fear to trust their own capabilities and prefer to take refuge in mass action is on the upsurge.

Looking back, therefore, as a student, teacher, practitioner and administrator in the field of medical education I have tried to determine why we have failed in our educational program to help our profession meet its challenges and what should be done in education and practice, even at this late date, if we are to save a vestige of the free enterprise we so dearly love in medicine.

In the first place, when I took my premedical work in one of our country's finest universities the emphasis was on science. "Take more science, take more chemistry, physics and biology". A course in psychology was suggested. On no occasion was I ever told by my premedical advisor that it might be useful to obtain some basic training in the social sciences. I believe that the pattern of my premedical course was pretty much the accepted one at that time and represents what most of the physicians of my vintage received. Some of us delved into the social sciences through interest aroused in one way or another, but relatively few felt they held any particular significance as to what we were aiming for as premedical students. Consequently, while physicians became scientifically sound clinicians, the social, economic and political impacts on medicine were either not fully appreciated or were ignored. Because we had not been sensitized we just couldn't be bothered.

This, I maintain, was partially responsible for the delayed reaction time of the medical profession to the stimulus of the changing order. This was an educational deficiency that would not have occurred if the medical educators of the twenties had been alert to the significance of the growing interests of social sciences or if the Arts and Science premedical advisors had been interested in breaking through traditional barriers.

Frankly, I consider that my college classmates and I wasted a good deal of time meeting what were then, and still are in some institutions, entrance requirements in some fields. Let us use modern foreign language as an example. Ninety percent or more of my classmates never thought again of their modern foreign language the day after they passed their medical school entrance requirement in it.

How much better off such students would have been with more psychology, some basic courses in sociology, economics, political science and modern history. Fortunately most medical schools today do not require modern foreign language for admission. And today which modern foreign language would be most useful anyway? Would it be German, French, Spanish, Italian, Scandinavian, Russian or Japanese? Too many of our colleges still adhere to a basic modern foreign language requirement because it has been the tradition to include it for a bachelor's degree. If we can ever reach the point where an international language can be agreed upon and then everyone learn that plus his native tongue the teaching of a modern foreign language of that type would be useful. Incidentally, I believe that this might be one of the greatest single contributions that could be made towards bringing about better international understanding . . . but this is perhaps beside the point.

In our college and university programs I am inclined to favor the type of outlook expressed by Benjamin Rush in his controversies with the Reverend Charles Nisbet, principal of Dickinson college, in 1788. Nisbet was appointed as head of the institution known as Dickinson College because of his marvelous learning. He was called a walking dictionary. It is said that he could repeat whole books of Homer and Virgil by heart and it is also reported that he memorized Cowper's "Task" in two readings. He was also skilled in Hebrew, including the Chaldee, Greek, Latin, French, Spanish, German and probably Erse (2). With disdainful disregard of the usefulness of such accomplishments on the American frontier this represented education to Nisbet. But Rush held that —

"While the business of Education in Europe consists of lectures upon the ruins of Palmyra and the antiquities of Herculaneum, or in disputes about Hebrew points, Greek particles, or the accent and quality of the Roman lan-

guage, the youth of America will be employed in acquiring those branches of knowledge which increase the conveniences of life, lessen human misery, improve our country, promote population, exalt the human understanding, and establish domestic, social and political happiness."

I believe that our good colleague of yesterday, Benjamin Rush, had a basic idea in his utilitarian program that could well serve as a guide for many of our academic institutions today. We need more objectivity and realism and less tradition.

I am firmly convinced that one of the weak places in premedical education even today is inadequate preparation in our own language. Too many of our students have totally inadequate preparation in English. Too many of our students have totally inadequate vocabularies. Too many students do not learn to read effectively in college and have not learned to study by the time they enter medical school. This probably goes basically deeper than college and lies in the methods used in the earlier teaching of English and study habits. As a result of this problem students in many instances waste enormous amounts of time fumbling. Doctor Herman Weiskotten (3), dean of Syracuse University Medical School, indicated some years ago that in his opinion the most common source of difficulty with first year medical students lay in inadequate training in this field. He found that remedial reading courses could frequently aid students to do much more satisfactory work. I would plead, therefore, for more and better English instruction for premedical students.

I would be the last person to desire to see premedical education stereotyped. There are certain basic essentials in science which anyone entering medicine should have. There are some students whose interests will carry them more extensively into biology, chemistry or physics and these individuals will be the ones more likely to turn towards basic medical science and its applications. There are others whose interests will turn them towards more psychology, the humanities and social sciences. They will more likely become the better psychiatrists of the future. There must be reasonable latitude for individual preferences in premedical training just as it must also extend on into professional training and later specialization.

At the time I entered medicine no thought was given during the first two years to anything but basic medical science and a minimum of feeble attempts to give this information some clinical application. A bit later some schools began to introduce a rather nebulous course called psychobiology into the first year of medicine. But in very few schools, if any, at that time was any real attention given to interest medical students seriously in socio-economic problems as they might effect medical practice. Gradually this has been done and these approaches have been introduced most commonly in courses in the field of public health and preventive medicine. In my medical school days public health and preventive medicine frequently was not a significant field of instruction in the eyes of the average medical faculty and the course was treated as a sort of side issue. The interest was focussed on clinical diagnosis, the drama of surgery and on therapy. Thus, again, my generation had a most excellent basic science and clinical training, but usually no significant contact during the training period with the socio-economic problems so important in the field of medical practice. As a result we were not socio-economically oriented as a group and the present day social readjustments caught our profession largely unaware of their significance.

These were definite failures in educational programs. Some of our leading medical educators were voices crying in the wilderness while most of our instructors went blithely on oblivious to everything but their own specialty field. This is one of the great inherent dangers of specialization. Individuals become so engrossed in the narrow field in which they perfect themselves that they tend to lose perspective as to the relation of that field to the entire area of medicine. We are living in an age of specialization and with the good things that go along with it we have allowed some of the more unfortunate aspects of specialization to become too significant. The general practitioner of the past has had to know his patient as an individual and not as a part of an individual. It is my firm conviction that the impersonal aspect of our specialization of recent years has been partially responsible for the misunderstandings between physicians and the public at large.

This is another area in which medical education might have played a much more foresighted role. Our medical schools have become more and

more specialized and some of them increasingly compartmentalized until the recent trend towards better integration was initiated. From the day a student entered medical school until the time that he received his diploma many a youngster has never experienced instruction from other than a specialist. A few of our schools endeavored to keep alive the idea of tying things together in undergraduate externships. Until public health and preventive medicine with its broad socio-economic outlook became more important in undergraduate medical training compartmentalization was dominant. The recent interest in psychiatry and sincere efforts to integrate it into all clinical phases of undergraduate teaching is an intelligent and useful development in helping to create a broader teaching perspective.

The development of our specialty boards still further augmented the trends towards specialization. I am not belittling specialization, for as an internist I live in a glass house, and I sincerely believe that thoroughly fine specialists are essential and must be adequately trained. I believe, however, that the individual who should still be the keystone in the firm medical arch, the general practitioner, has been the forgotten man in this frenzy towards specialization.

Time was when a medical school diploma was "open sesame" and its holder could undertake anything and everything that the term "doctor of medicine" covered. The growth of knowledge in medicine has been so great during the past fifty years that an individual would be a "jack-of-all-trades and master of none" to even assume that he could be competent in all phases of the profession today. Consequently, there needs to be a clear-cut definition as to what is encompassed in the modern usage of the term "general practice." Furthermore, there must be adequate undergraduate and graduate opportunities developed to make it possible for interest to increase in this field and for those who have such an interest to obtain the kind of a background that will make it possible to enter the field reasonably trained for it. For many years in hospitals and schools we failed to offer an effective program for training men for general practice. Aside from internships hospital opportunities were largely restricted to residencies in specialties. This became more restricted than ever with the development of the specialty boards. In-

eidentally it is an easy task to develop a residency in a specialty and a very difficult one to work out adequately a good program for a residency in general practice. Actually an individual seeking preparation as a resident in the field of general practice could rarely find one adapted to that end. Recently a few of our medical schools have interested themselves in developing residencies that offer the kind of opportunities in general practice that have long been overdue.

General practice in itself should be a specialty. In my opinion the great emphasis in preparation should be on diagnosis with the largest share of the resident's time allocated to medical diagnosis and rational therapy. The residency should also include sound training in pediatrics, normal obstetrics and certain emergency surgical procedures. Such a residency should be at least two years in length. It should be so handled that the resident general practitioner would be the first to know his limitations and to seek the aid of the specialists in another field when such aid is needed for his patient. Such training if more generally offered can do much to revitalize the importance of the patient as an individual and to prepare young men and women in the future for the field of practice that is still the greatest challenge of all if done properly.

Medical education is a continuing process throughout life. There is no field more dynamic from the standpoint of perpetual change than is our profession. The constantly changing and improving diagnostic and therapeutic procedures offer a continuously varying panorama that challenges the clinician throughout his life.

So far I have restricted my discussion to some of the problems in the background of medical practice, endeavoring to indicate what I feel to be some of the areas where we have failed in our premedical and medical education in developing an adequate breadth of perspective in students. I do not consider all of our problems today to be the results of these factors but I feel that they have played a role in leaving serious gaps in the educational pattern. American medical education has made such tremendous advances in the past half century that it is probably begging the point to be overly critical but we could have done better and we will do better in the future. But what about medical practice?

Although we have the most advanced medical knowledge the world has ever seen in this great

country of ours, we are all fully aware that there are medical service deficiencies. It is obviously true that the distribution of medical services could be better and that there are areas seriously in need of medical personnel and facilities. But medical education and the medical profession cannot be held primarily responsible for this situation. Population factors, social, economic and environmental elements all play significant roles. In the stateist scheme of thought the state is not at fault and it must have a scapegoat. Someone must be blamed for the deficiencies and, as Moore (4) has recently stated, the politically amateur doctor makes a wonderful target for the stateist demagogue who pictures the medical profession as parasitic monopolists, from whose damnable depredations and impositions the heroic federal authorities can protect the innocent public.

What are some of the things that make us such shining targets? Let us analyze ourselves a bit. From ancient times our ethical codes have been lofty ones. We belong to a profession where intimate personal contacts are daily routine and where we must use careful judgment and discretion. If we are doing our tasks well we hold confidences such as no one else other than the religious confidant is privileged to know. This is particularly true of those of our profession who still practice as family physician general practitioners. In our busy professional lives we have been inclined to clothe ourselves with a false cloak of adherence to ethical ideas beyond the dictates of reason.

The medical profession is made up of human beings with the same frailties and weaknesses as well as the strength inherent in all other human groups. Our ethical codes do make it mandatory to be the right kind of professional individuals. The public at least seems to feel that there needs to be some housecleaning in our profession and that we, as a group, should not allow some of our colleagues to carry on activities that discredit physicians. We are inclined to wait for the law to catch up with the known irregulars and borderline practitioners rather than see that they are haled before the law by their professional brethren as undesirable physicians and citizens. Protection of such individuals is misguided ethics.

Furthermore, there are unethical things that fall entirely within the law but that hurt our profession when they are permitted to go on. As

a single example I might mention the production line tactics that developed in some offices during the strenuous demands of the recent war. There were not enough physicians to cover the overall needs and many of us had to take care of more patients than we could care for effectively. It was a terrifically strenuous time and we were mighty glad to see the war end and former colleagues together with new ones come back and take over some of the load. During that period the shekels came in, the end of the emergency arrived and the need for the production line was over. I know of too many instances where the mass production technic still continues four years after the end of hostilities, where physicians have built a machine that makes it impossible for them to actually see and study their patients carefully. Some of them have built up such a heavy overhead that they feel they must continue mass production to make ends meet financially. This is not good medicine and it should not be acceptable to our profession. We do not need union controls and restrictions but we do need self discipline and common sense in matters of this kind.

We occasionally have a fellow clinician who is so disdainfully aloof towards politics and civil service that he succeeds in creating an impression of supercilious superiority that is maddening to the public. For example, not long ago a relatively insignificant incident occurred within my own staff that illustrates how troublesome such attitudes can become. During a recent campaign for one of the national charitable agencies the campus chairman wrote to each department head in the university requesting that he appoint someone within his department to make collections and forward them. It was a simple direct request for cooperation in a very worthy enterprise. Instead of carrying out this simple request and asking the departmental secretary to contact the various department members the department head sat down and wrote the campaign chairman to the effect that his staff was just too busy to be bothered with such trivia. The professor is one of the finest colleagues I have and an individual who has great responsibility within our group. The request reached him at a time when he was exceedingly busy and he did not stop to think of the implications of his little note. The first I heard of the matter was an

irate telephone message from the campus chairman of the campaign with some caustic remarks about the supercilious attitude of the medics and their failure to cooperate in the project. It did not occur to the gentleman that every other department in the school had responded wholeheartedly.

It should not be necessary to sit down and write every department head and tell him that his department was a part of the university and it was his responsibility to cooperate effectively with the rest of the institution in projects of such nature. This possibly offhand seems like a very foolish example. . . .but I feel that it aptly illustrates an important point. It was just one individual who wrote such a note, but in the campus back-lash of gossip it was the high-brow doctors and included us all. It emphasizes the fact that today each one of us represents far more than ourselves in our contacts with our fellow men.

We as a group have been slow to aid the public to understand many of the problems that both they and we are facing. We have not very effectively helped to solve the problem of personnel and facility shortages in the field of health. We have not done too good a job of helping the public divorce the inflated costs of hospitalization from costs of professional medical care. Too many people still lump them together and blame the entire cost factor on the physician.

Public relations are, after all, definitely within our own hands. In spite of ample warnings as long as two decades or more ago we continued to plod along doing our daily tasks while we turned deaf ears to the gradually increasing rumble. Even our leaders, whose business it should have been to keep more fully aware of the situation, heard the rumbling but assumed the attitude that there could be no change, that any change was wrong and that it was even wrong to talk and think about it. Why even analyze or study the situation? It just could not happen in our free enterprise state. But, after all, our leadership is us as far as the public is concerned. Finally we reached a point where we were placed on the defensive although the world has known for a mighty long time that the best defense is a good offense. The offensive until recently has been on the other side.

Everyone of us is a public relations ambassador for all of the rest of our profession. Good am-

bassadors go about their tasks quietly and effectively, loved and even revered by their patients. They live normal unostentatious lives. Poor ambassadors "put on the dog," they and their families frequently put on a front that arouses unreasoning resentment and even fury in the community, particularly among those who have difficulty in meeting their medical bills. The biggest and most expensive car in town sometimes does not help public relations.

Public relations, in my opinion, consist in doing and not in talking. It means service above self in our profession. It means availability. It means consideration for the patient and the patient's family. It means helping people understand some of our problems so that the minor annoyances and inconveniences that patients sometime encounter will not lead to misunderstanding. It means having the office morale that spells confidence and teamwork. It means that the personal touch is still a vital part of good medical practice.

Regan (5) has stated that malpractice as far as medicine is concerned was not a serious menace until recent years. In the twenties there was an increase of claims of this type and during the depression decade malpractice suits were increasingly heavy. By 1945 the local malpractice claims in California were the worst in history. Malpractice suits are miserable experiences for physicians to go through. Reputation and integrity are assailed and placed in jeopardy. Possibly this evil is part of the reflection of the times. It seems to me though that the trend is sufficiently serious to merit thought on our part. The elements of malpractice suits fall into the classification of ignorance, negligence or willful departure from accepted and usual methods of practice on the part of physicians. Actually as Regan has so aptly stated actionable malpractice consists in the physician doing something he should not do or in omitting to do something he should do in the care of his patient, the standard being what the average physician would or would not do in similar circumstances.

Because malpractice suits tend to breed more malpractice suits and do have a direct bearing on public relations I feel that it is important for the average physician to make it his business to know what he should do to safeguard himself and to use every precaution against unjust malpractice accusation. It is also very important

that medical students during their undergraduate training experience careful instruction in the field of forensic legal medicine.

The trend towards specialization has been associated with an ever increasing tendency to restrict practices to office hours and to avoid home calls. True enough, the average home call should be the province of the general practitioner. Unfortunately calls are refused occasionally that should have been made and we all know of instances where failure to respond to emergency calls or to aid in obtaining someone else has led to terrific resentment, not just towards the individual, but towards the profession. One widely publicized incident of this type in a community creates resentment that is hard to eradicate. This is unreasonable, but nevertheless true.

Medicine to most people is at least a partially mysterious field although most individuals have a bit of the physician instinct in them. They want to know what is wrong and why certain things are done. They complain about things that they do not understand, particularly if they are given the idea that some way or other they are not quite intelligent enough to understand. They usually are inclined to accept with reasonable grace when reasons are made plain to them.

I have spent a lot of time on this matter of public relations, but I consider it very important. How many of you have carefully analyzed some of the national legislative bills that have been before our Congress or some of the legislation that has gone before your state governing bodies during recent years? How many have seriously endeavored to find out just exactly what the Murray-Wagner-Dingle Bill or the Oscar Ewing plan actually imply? How many of us have really endeavored to assist our lay friends to fully understand that these issues are basically their concern, not just ours?

Recently I attended a Chamber of Commerce luncheon in a Western city and listened to a discussion on the future of medicine and compulsory insurance in this country. One side, the pro-compulsory insurance aspect, was presented by a college professor in a graduate school of social work and the other side was discussed by the public relations counselor of a state medical association. Being a Chamber of Commerce gathering you can well imagine the general tenor of thought and attitude of the audience. The professor of graduate social work was obviously

talking to a thoroughly hostile audience. However, he presented a very carefully worked out paper giving his interpretation of compulsory insurance and his analyzed reasoning in favor of it. Analysis of his argument left him vulnerable on a number of points and offered real targets for an excellent rebuttal. The public relations counselor for the medical association then assumed the floor. Appearing before the Chamber of Commerce, of which he was a member, he knew he would be talking to an audience favoring free enterprise and voluntary insurance as opposed to stateism and compulsion. There were a few attempts at jokes and jibes as to the previous speaker's material. There was no organized thought behind his rebuttal. He did not take a single instance from one of the vulnerable issues and counter or clarify it. His reasons for desiring free enterprise were simply that he had always enjoyed it, it was what his father had enjoyed, it was typically American and we just didn't want it changed. It was a very sickly rebuttal to a carefully prepared statement and completely missed fire. In fact he had given no reason as to why compulsory insurance might not be the Utopian answer. This is not good public relations.

These problems of health, medical care, hospitalization and other phases of public welfare are the business of every thinking American citizen. If we are opposed to some of the trends which we believe to be harmful to the welfare of our fellow citizens our presentations must be of the caliber that will not leave us "holding the bag"....but will make our fellow citizens desire to "carry the ball" for their own welfare, not for ours.

Thus, to me, medical practice entails responsibilities far and away beyond the mere diagnosing and care of patients. It involves citizen leadership of the highest possible order. It involves our ardent support of public health programs, health education and the protection of the public from health hazards of all kinds. It means that we must be responsible for developing public relations involving the education of the public as to the problems of medicine. It means that we must support workable health insurance programs that really give lower income bracket families the protection needed against catastrophic medical and hospital costs. It means that we must find a better means of caring for the

indigent population that will not be covered adequately by either a compulsory or voluntary insurance program. It means that there must be an enlistment of all organizations and groups which are connected with health promotion in an effort to intelligently attack problems and seek rational solutions.

Physicians, nurses, dentists and the lay public should place their problems frankly before each other and work together to solve them. The inherent dangers of stateism can win over the advantages of free enterprise unless we convince the public that we are deeply concerned with more than seeing patients and collecting fees and that we are determined to do everything possible to aid in making adequate medical service available to everyone.

I fear that I have rambled a good deal in this presentation, but it has been intentionally so. I wanted to discuss with you some of the impressions I have gained as I look over our present day problems and have tried to evaluate some of the factors underlying them. I am certain that there have been faults in our educational pattern, particularly at a time when social changes were occurring that we should have faced more realistically. These defects are being changed today. We need more thought given to the type of utilitarian education that Benjamin Rush wrote of in regard to exalting the human understanding and the establishment of domestic, social and political happiness. We must have a better integration of socio-economic aspects of life throughout undergraduate medical education and on into the continuous educational experience of medical professional life.

In practice we should avoid the aloofness that so many of our profession have assumed in regard to politics and community problems and take part in the practical aspects of living in a society of which we are a vital cog. The time is late, but the outlook for medicine still lies largely in our hands and in this thing that we call public relations, the significance of which cannot be ignored any longer. Advise that Society take heed to the words of its president Dr. Perry Hopkins—so adequately expressed earlier this morning.

As Allen (6) has so aptly summarized the situation, "Tomorrow's world has the power and resources to meet man's every need. Whether man has the wisdom, humility and social conscious-

ness to use his new-found powers for the constructive purposes of all mankind is the most important question of our times. The free men of democracy have proved that democracy has the inherent strength to be victorious in a world at war; they have yet to prove that they can win a durable peace. Never before has the spiritual and moral life of man faced a test of this portent for good or evil."

And furthermore, continuing to quote Allen, "Medicine, with its age old concern for the sick — the poor as well as the rich, the weak as well as the strong, has been an influence for good surpassed only by the moral precepts of religion. The services of medicine, like those of religion, have been largely personal. While there will always be a need for personal services, medicine of the future, if it is to progress as a social as well as a biological science, must broaden its outlook and adjust its educational program

accordingly. Medicine is coming of age as a social science in the service of society."

Finally, I would like to refer again to the last sentence quoted from Doctor Elliot Smith at the beginning of this address to the effect that we must do all of this in spite of the engrossing demands of our professional work.

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Sir William Osler

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The year 1949 is the centennial of the birth of Sir William Osler. His immortal achievements have placed him in the medical heavens, a luminary of the first magnitude, with Hippocrates, Harvey, Sydenham, Hunter and Pasteur. The basic principles of pathology sown by Morgagni and Rokitansky and Virchow blossomed through his widely studied "Principles and Practice of Medicine" as well as through his many hundreds of articles in the literature. His continuous and vociferous teaching of the anatomic and pathologic basis of disease is as historically significant as the dictum of Hippocrates that theology must be divorced forever from medicine or the exaction of Paracelsus that medicine cannot progress strangled by adamant respect to authority. The more intimate the physician becomes with the morgue the more rational and scientific his therapy. No man more fervently observed this truth than Osler.

Blood platelets, small pox, typhoid fever, leukemia, pernicious anemia, tuberculosis, aneurysm, endocarditis, pneumonia, chorea, asphasia and cirrhosis are a few of the fields adorned by his catholic contributions to internal medicine.

As an inspiring teacher he hardly had a peer. The method of teaching at the bedside introduced by Sylvius in Leyden during the 17th century and practiced by Boerhaave in the 18th was the method that magnetized Osler's students at McGill, Blockley in Philadelphia, Johns Hopkins Hospital and the Radcliff Infirmary in Oxford, and now an integral part in the curriculum of every medical school. A friend of youth, he fired his students with a contagious enthusiasm which has tinted the whole of modern medicine. His students were his companions, and no request was too much to ask of him. His home, whether at 1 W. Franklin Street, Baltimore or 13 Norham Gardens, Oxford, thanks to Lady Osler, was ever hospitable to its thousands of doctors who

From the University of Illinois College of Medicine.

sought encouragement, suggestion and inspiration from the "chief". Most often hidden from view, occasionally before the public eye, Osler's influence was felt in the great movements of the beginning of the nineteenth century. Amongst these were forging the American Medical Association on a strong national basis, begetting the National Tuberculosis Association, impelling the growth of pathologic museums and libraries in England, Canada and the U. S. A., and in promoting high standards of medical education, public health and sanitation.

Great though be Osler's contributions to scientific medicine, greater still is his devotion to the noblest qualities of the art of medicine. In this respect he is Hippocrates reborn. He imbues medical students with the highest standards of learning and study, and edifies the practitioner with cheer, sympathy and sagely advice.

A few of the cherished aporisms are undying nuggets of medical literature:

"Many good men are ruined by successful practices.

"In the records of no other profession is there to be found so large a number of men who have combined intellectual pre-eminence with nobility of character.

"It will be acknowledged that in this country doctors are, as a rule, bad citizens, taking little or no interest in civic, state or national politics.

"It is the sign of a dry age when the great men of the past are held in light esteem.

"By the historical method alone can many problems in medicine be approached profitably.

"In the continual remembrance of a glorious past individuals and nations find their noblest inspiration.

"Miserable chauvinism can corrupt the great and gracious ways which should characterize a liberal profession.

"Medicine is the profession of a cultivated gentleman.

The ideal teacher combines "the stern sense of duty with the mental freshness of youth.

"Our duty is to better our times.

"Our mission is of the highest and noblest kind, not alone in curing disease but in educating the public in the laws of health and in preventing the spread of plagues and pestilences.

Progress in science and industry "has been made possible by men who did pioneer work in chemistry, in physics, in biology and in physiol-

ogy without a thought in their researches of any practical application.

"What I inveigh against is a cursed spirit of intolerance, conceived in distrust and bred in ignorance that makes the mental attitude perennially antagonistic, even bitterly antagonistic, to everything foreign that subordinates everywhere the race to the nation, forgetting the higher claims of human brotherhood.

"Our students study too much under one set of teachers" and "do not move about enough.

"We are free at all times from a self-satisfied feeling of superiority." There is "no nationalism in medicine."

The physician "Belongs to a guild which owes no local allegiance, which has neither king nor country, but whose work is in the world.

"Shun as most pernicious that frame of mind, too often, I fear, seen in physicians, which assumes an air of superiority and limits as worthy of your communion only those with satisfactory collegiate or sartorial credentials.

"The passports to your fellowship should be honesty of purpose and a devotion to the highest interest of your profession.

"No matter how trifling the matter at hand, do it with a feeling that it demands the best that is in you, and when done look at it with a critical eye, not sparing a strict judgment of yourself.

" . . . a scientific discipline is an incalculable gift, which leavens his whole life, giving exactness to habits of thought and tempering the mind with that judicious faculty of distrust which can alone, amid the uncertainties of practice make him wise unto salvation.

" . . . draw from your errors the very lessons which may enable you to avoid their repetition.

"The grace of humility is a precious gift.

"Only by keeping the mind plastic and receptive does the student escape perdition.

"The wrangling and unseemly disputes which have too often disgraced our profession arise in a great majority of cases on the one hand from this morbid sensitiveness to the confession of error, and on the other from a lack of brotherly consideration and a convenient forgetfulness of our own failings.

" . . . the doctor has a curious, shall I say morbid? sensitiveness to personal error

often accompanied by a cocksureness of opinion which if encouraged lead him to so lively a conceit that the mere suggestion of a mistake under any circumstances is regarded as a reflection on his honor, a reflection equally resented whether of lay or professional origin.

"The higher the standard of education in a profession the less marked will be the charlatanism.

"Acquire early the art of detachment by which I mean the faculty of isolating yourselves from the pursuits and pleasures incident to youth.

". . . your lives of devotion may prove to many a stimulating example.

"You cannot afford to stand aloof from your professional colleagues in any place. Join their associations, mingle in their meetings, giving of the best of your talents, gathering here, scattering there; but everywhere showing that you are at all times faithful students, as willing to teach as to be taught.

"The great republic of medicine knows and has known no national boundaries, and post-graduate study in other lands gives that broad mental outlook and freedom from the trammels of local prejudice which have ever characterized the true physician.

". . . a calm acquanimity is the desirable attitude.

"Imperturbability means coolness and presence of mind under all circumstances, calmness amid storm, clearness of judgment in moments of great peril, immobility, impassiveness, or to use an old and expressive word, 'phlegm'. It is the quality most appreciated by the laity, though often misunderstood by them, and the physician who has the misfortune to be without it, who betrays indecision and worry, and who shows that he is flustered and flurried in ordinary emergencies, loses rapidly the confidence of his patients.

"Stand up bravely even against the worst.

"An inscrutable face may prove a fortune.

". . . you belong to the great army of quiet workers, physicians and priests, sisters and nurses all the world over, the members of which strive not, neither do they cry, nor are their voices heard in the streets, but to them is given the ministry of consolation in sorrow, need and sickness.

". . . to you is given the harder task of illustrating with your lives the Hippocratic stand-

ards of learning, of sagacity, of humanity, of probity.

"Of learning, that you may apply in your practice the best that is known in our art, and that with the increase in your knowledge there may be increase in that priceless endowment of sagacity, so that to all everywhere skilled succor may come in the hour of need.

"Of a humanity, that will show in your daily life tenderness and consideration to the weak, infinite pity to the suffering, and broad charity to all.

"Of a probity that will make you under all circumstances true to yourselves, true to your high calling, and true to your fellowman.

"Learn to accept in silence the minor aggravations, cultivate the gift of taciturnity.

". . . We are here not to get all we can out of life for ourselves, but to try to make the lives of others happier.

"The practice of medicine is an art, not a trade; a calling, not a business; a calling in which your heart will exercise equally with your head.

". . . if your heart's desire is for riches, they may be yours; but you will have bartered away the birthright of a noble heritage, traduced the physician's well earned title of the 'Friend of Man', and falsified the best traditions of an ancient and honorable guild.

"No other profession can boast of the same unbroken continuity of methods and ideals. We may indeed be justly proud of our apostolic succession. Schools and systems have flourished and gone, schools which for generations have swayed the thought of our guild; the philosophies of one age have become the absurdities of the next, and the foolishness of yesterday has become the wisdom of tomorrow; through long ages which were slowly learning what we are hurrying to forget, amid all the changes and chances of twenty-five centuries, the profession has never lacked men who have lived up to these Greek ideals. They were those of Galen and Aretaeus, of men of the Alexandrian and Byzantine schools, of the best of the Arabians, of the men of the Renaissance, and they are ours today.

"Even with disaster ahead and ruin imminent, it is better to face them with a smile, and with the head erect, than to crouch at their approach.

"Hilarity and good humour, a breezy cheerfulness — help enormously both in the study and the practice of medicine. To many of a sombre and sour disposition it is hard to maintain good spirits amid the trials and tribulations of the day, and yet it is an unpardonable mistake to go about among patients with a long face.

"The hardest conviction to get into the mind of a beginner is that the education upon which he is engaged is not a college course, not a medical course, but a life course, ending only with death . . ."

"The cultivated general practitioner. May this be the destiny of a large majority of you! Have no higher ambition! You cannot reach any better position in a community; the family doctor is the man behind the gun, who does our effective work. That his life is hard and exacting; that he is underpaid and overworked; that he has but little time for study and less for recreation — these are the blows that may give finer temper to his steel, and bring out the nobler elements in his character.

Born the youngest son of a minister's family of nine, July 12, 1849, at Bond Head, near Toronto, Canada, Osler was weaned at Trinity College. Sharpened by studies in geology and biology, he became engrafted with the high principles of his teachers, William A. Johnson, priest of the parish of Weston, Ontario, and Dr. James Bovell of the Toronto School of Medicine. With burning fervor he enjoyed his medical studies at McGill, inspired by its dean Robert Palmer

Howard. After an extensive experience in the necropsy room at Montreal General Hospital he departed for London where he discovered the blood platelets, then learned the best that Aesculapius had to teach in Edinburgh, Paris, Berlin, Vienna and Rome, and planted the seeds of a new medicine in America, based on research and bedside teaching. With the illustrious leaders, Pepper, Samuel Gross and Weir Mitchell, Osler served the University of Pennsylvania and with the distinguished Welsh, Halsted and Kelly established the Johns Hopkins Hospital and Medical School as an ideal for future medical institutions.

Though his death at Oxford in 1919 brought a sudden close to his many literary and scientific attainments, his name burns more brightly today, the very prince of nobility, honor, charity, kindness, understanding and learning. Of high ideals, medicine has had no greater standard-bearer, a chosen son of Apollo.

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DRUGS CUT DEATH RATE OF RARE MUSCLE DISEASE

Modern methods of treatment have reduced the mortality rate of myasthenia gravis to about 10 per cent, according to two doctors from the University of Texas School of Medicine, Galveston.

In this rare disease, the cause of which baffles doctors, the victim's muscles progressively become weaker. The muscles most frequently affected are those concerned with movements near the eyes, with

resulting squinting and "seeing double." Generalized muscular weakness also occurs.

Untreated, the disease runs a fatal course in 50 to 75 per cent of cases in a few years, Dr. Charles T. Stone and J. Alfred Rider write in the Sept. 10 Journal of the American Medical Association.

Drugs, principally neostigmine and tetraethylpyrophosphate, give complete relief in some cases and have greatly reduced the mortality rate of the disease, which is now probably about 10 per cent, they say.

The Treatment of Brucellosis

**C. Wesley Eisele, M.D.¹, and
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Chicago**

The treatment of brucellosis is in a state of confusion which is almost as great as that surrounding its diagnosis. Scores of treatments have been advocated with more or less enthusiasm only to be discarded later. A list of the multitude of remedies that have been recommended for this disease would be both appalling and enlightening.

The difficulty of judging therapeutic efficacy in brucellosis is readily understood when one considers the erratic and unpredictable course of this infection which may last for a few days to many years. Further, the diagnosis is fraught with many pitfalls,¹ and unproven cases are often used to support advocated treatments. Not only are there no completely reliable laboratory tests,^{2,3,4} other than recovery of the causative organism which may be most difficult, but also the symptoms and the findings on physical examination are not specific and cannot alone be relied upon for diagnosis. Certainly, for evaluation of experimental therapy the diagnosis must be critical, and recovery of the organism is essential for proof that the patient has the disease.

Vaccines of many sorts have enjoyed an unusual popularity without significant evidence that they are beneficial in ridding the body of infection. The many varieties of vaccine and the numerous methods of administration which have been recommended speak for their general lack of effectiveness in terminating the disease. One is variously advised to inject the vaccine intracutaneously, subcutaneously, superficially or deeply, intramuscularly, intravenously, in doses large enough to produce a sharp reaction, or in doses small enough to avoid all reaction. It has even been recommended that vaccines be started

in such fantastically small doses as the antigen from 0.0000004 of one bacterium!⁵ It is difficult to understand how the injection of any vaccine or bacterial product in any conceivable manner can stimulate a patient's immunity or resistance to an infection better than the living organisms which are already present. Conceivably, the patient may sometimes be made more comfortable through a change in sensitivity to the products of infection, but one may justly question whether vaccines assist in eliminating the invading bacteria from the body, which should be the prime object of treatment.

The literature contains scores of papers purporting to show the efficacy of vaccines and bacterial products in brucellosis, but few if any of these definitely establish this point or withstand critical evaluation. Tenuous diagnoses unsupported by adequate laboratory evidence and lack of proper untreated control series render the greater part of this literature unintelligible. Recently, a paper appeared in the *Journal of the American Medical Association*⁶ claiming excellent results with vaccine treatment in 300 cases of chronic brucellosis. The author concluded that the vaccine produced improvement, remissions or recoveries in 85 to 90 per cent of all cases, although in the majority, injections were required every 2 to 5 days for more than a year. The diagnostic criteria for this series of patients were not given, instead the reader was referred to an earlier publication which discussed the criteria in 100 cases of chronic brucellosis.⁷ In this series the causative organism was recovered from only one patient! The agglutination test was positive in only ten cases, in two of which it was doubtful because of hemolysis, and in only four cases was there a titer of 1/80 or higher. Apparently the one criterion upon which this author insisted was a positive skin test. He tested the patient repeatedly with increasing strengths of antigen up to undiluted vaccine, until the skin reacted at least with some

¹From the Department of Medicine, School of Medicine, University of Chicago.

²S. A. Surgeon, United States Public Health Service.

³Aided in part by a grant from Swift and Company. Presented at the Annual Meeting of the Illinois State Medical Society, Chicago, May 12, 1948.

erythema. No one would consider treating a patient for tuberculosis if the diagnosis rested solely upon non-specific symptoms and a positive tuberculin test. Yet this sort of situation seems to be common practice in brucellosis, although the two skin tests should be interpreted analogously. It is evidence of this nature which has been presented in numerous papers enthusiastically supporting the use of vaccines in the treatment of brucellosis, and throughout the country it seems to be common practice to administer brucella vaccines to patients with diagnoses based upon similarly unconvincing evidence.

Brucellin has long been one of the most popular forms of the vaccine type of treatment. This product is a culture filtrate originated by Huddleson about 15 years ago.⁸ Huddleson has collected data on literally thousands of patients who have been treated with this material. His present opinion is that "Brucellin, like all the other brucella allergic agents, does not appear to be of much value as a therapeutic agent in the chronic form of the disease."⁹

It should be remembered that even a single dose of any vaccine is apt to seriously disrupt the common diagnostic tests. The use of vaccines in cases with questionable diagnoses is therefore especially to be deprecated. Scarcely a week passes but that we are called upon to evaluate patients with chronic symptoms who have received brucella vaccine on the basis of inadequate or questionable evidence for the disease. Usually we are then unable to either substantiate or dispute the diagnosis even with complete laboratory facilities available.

In the early days of the sulfonamides, enthusiasm ran high for their curative effects in brucellosis. A similar enthusiasm was experienced when streptomycin appeared. It is now known that although both of these drugs inhibit or kill brucella in the test tube, neither one of them alone is of much value in the clinical disease. Even in the experimental disease in animals, the drugs are beneficial only if given during the incubation period. When symptoms have appeared before the drug is administered, the animal fares little if any better than the untreated control animals.

In April, 1947, we reported a case of brucellosis¹⁰ which was unusual in that there was a persistent, constant septicemia, a persistent high fever and grave symptoms present for a period

of many months — a type of case which is ideal for the evaluation of therapeutic agents, but one which is rarely encountered. Following a gradual onset, a continuous fever and serious symptoms developed and persisted for 9 months before admission to the hospital. In the hospital there was daily fever from 102° to 104°F and a constant septicemia with 30 consecutive positive blood cultures in 68 days.

Three one-week courses of streptomycin were given with doses of 4, 6, and 6 to 8 grams daily. No effect was noted on the fever, the clinical course or the septicemia, positive cultures being obtained during and immediately after each course. The organism retained its initial sensitivity to the drug, and the blood level was 2 to 5 times the *in vitro* lethal concentration at all times tested.

Sulfadiazine was then given in daily doses of 4 to 10 gms for 18 days without beneficial effect on the fever, symptoms or septicemia, 4 blood cultures being positive during this period. After 18 days, the sulfadiazine was continued and streptomycin was added. On the first day of the combined treatment, the blood culture became negative for the first time in 68 days. The temperature curve became normal and prompt marked clinical improvement became apparent. After a short convalescence, recovery was complete and he has remained well for 2 years. There have been no relapses and he is working hard every day at heavy manual labor.

Others have used this combined sulfadiazine-streptomycin treatment. There are now 17 case reports in the literature.^{11,12} These cases with additional ones treated by ourselves and those reported to us in personal communications now total 38. This combined treatment appears to be specific in the acute phase of the disease. Apparent cures have been obtained in 2 cases of brucella endocarditis, a form of the disease which heretofore has been uniformly fatal. Observations on the chronic phase of the disease have been limited, but here, too, the combined treatment appears to have some merit.

Because of the inherent toxicity of streptomycin with potential danger of permanent damage to the nervous system it is strongly recommended that this treatment be reserved for the seriously ill and seriously incapacitated patient who is unlikely to recover without it. The characteristic toxic manifestations on the vestibular branch

of the 8th cranial nerve have been observed in several of our patients to the point of seriously interfering with walking. It appears that these changes are due to necrosis of the nuclei and may often be permanent^{13,14} although considerable compensation may occur in some individuals. We have observed other manifestations of central nervous system damage including involvement of the 3rd, 4th, 5th, 6th, and 7th cranial nerves. The incidence and severity of toxic manifestations appear to be greater in these patients than that experienced with comparable doses of streptomycin in other diseases. One must consider the possibility that the addition of sulfadiazine may enhance the toxic effect as well as the therapeutic effect of streptomycin. The nature of the disease may also have some possible role in increasing toxicity of the drugs.

At the present time, we are using smaller doses of streptomycin. We recommend that usually not more than 2 grams daily should be used for 14 days. We try to maintain sulfa blood levels of 10 mg per cent, and usually 6 mgs daily is an adequate dose. The sulfadiazine may advantageously be continued for an additional 2 or 3 weeks after discontinuance of streptomycin.

Recently, Huddleson has proposed a new treatment for brucellosis consisting of small doses of sulfadiazine (2 or 3 gms daily, with blood levels of 3 to 5 mg per cent) combined with transfusions of whole blood or preferably of pooled fresh plasma. This treatment is based upon *in vitro* and *in vivo* experimental evidence supporting the concept of synergistic action of the sulfonamides, complement, and natural or acquired antibody. Clinical data on 40 cases⁹ give evidence that this treatment has merit. We suggest the use of this treatment in patients not ill enough to warrant the risk of the combined sulfadiazine-streptomycin treatment.

ADDENDUM

Since the preparation of this paper, the use of several new drugs in brucellosis has been reported.

It is recommended that dihydrostreptomycin be substituted for streptomycin in the combined therapy. Serious toxicity with streptomycin-sulfadiazine has been reported (McCullough, N. B. and Eisele, C. W.: J.A.M.A. 139:80-82 (Jan. 8, 1949).) This has been obviated at least in part by the newer dihydrostreptomycin. Reports

of the efficacy of the combined treatment continue to appear. (Harris, H. J. and Jett, P. C.: J.A.M.A. 137:363-364 (May 22) 1948; Scowen, E.F. and Carrod, L. P.: Brit. M. J. 2:1099 (Dec. 25) 1948; Spink, W. W. et al. J.A.M.A. 139:352 (Feb. 5) 1949; Herrell, W. E. and Nichols, D. R.: Med. Cl. N. Am. 33:1079 (July) 1949).

Chloromycetin and aureomycin have been described with some enthusiasm as effective agents in brucellosis. Both should be considered to be still in the experimental stage. Their *in vitro* effect on brucella is inferior to that of combined sulfadiazine and streptomycin, facts which should temper one's expectations.

The use of aureomycin in brucellosis has been reported by several workers. (Spink, W. W. et al: J.A.M.A. 138:1145-1148 (Dec. 18) 1948; Bryer, M. S. et al: Bul. Johns Hopkins Hosp. 84:444 (May) 1949; Knight, V. et al: Am. J. Med. 6:407-416 (April) 1949). From these published reports and other personal communications it appears that the relapse rate is high.

Chloromycetin has been used by Woodward, T. E. (Personal communication) in the treatment of 9 patients with brucellosis and by Knight et al (Personal communication) in 13 patients. Prompt remissions occurred in most patients, but in Knight's series 2 failed to have complete remissions and 6 relapsed (failure of therapy in 62%). The periods of treatment were relatively brief (6 to 10 days).

Our own experience with aureomycin and chloromycetin, although quite limited, has not been impressive. Relapses or failures have been observed with both drugs, even with large doses. One patient given chloromycetin for 14 days (total amount of 21 gm.) continued to have positive blood cultures daily throughout the treatment period, although levels of the drug in the blood were as high as 10 to 20 times that which inhibited the patient's organism in the test tube.

The effects of aureomycin and chloromycetin in brucellosis appear to be approximately equal. The maximal effective doses have not yet been established. Because of the reported high relapse rates on short courses (6 to 14 days) treatment will probably need to be prolonged if it is to be effective. But there is no evidence at present to indicate that larger doses or longer courses will prove effective.

About half of the patients treated with these two drugs experienced diarrhea or nausea and vomiting which, at times, was quite severe. Some experienced an exacerbation of fever and symptoms and some developed a shock-like picture shortly after the onset of treatment.

Herrell, W. E. and Barber, T. E. (Proc. Staff Meetings of the Mayo Clinic. 24:138-145 (Mar. 16) 1949) treated 4 patients with apparent immediate success using aureomycin (3 gm. daily) and dihydrostreptomycin (2 gm daily.) for 14 days.

After promising results of *in vitro* studies in our laboratory with the combination of sulfadiazine, dihydrostreptomycin and aureomycin, we have successfully used these three drugs simultaneously in the treatment of one patient. This patient had previously received in succession treatment with Huddleson sulfa-transfusion, chloromycetin, aureomycin, and combined sulfadiazine-streptomycin and had relapsed following each.

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USE RADIOACTIVE COMPOUND TO CONTROL RARE BLOOD DISEASE

Control of the rare and previously fatal blood disease, polycythemia vera, a condition in which the body manufactures red blood cells too rapidly, is reported by Dr. John H. Lawrence of the University of California, Berkeley, in the Sept. 3 Journal of the American Medical Association.

In the treatment developed by Dr. Lawrence and his colleagues, a compound (sodium radiophosphate) containing radioactive phosphorus is administered. This chemical collects "to a pronounced degree" in bone, bone marrow, and some rapidly growing

tissue and apparently inhibits red cell production, according to the article.

Persons treated for polycythemia vera with the radioactive compound now have as favorable an outlook as do those treated for sugar diabetes with insulin or those treated for pernicious anemia with liver, Dr. Lawrence says. He bases his conclusion on a 10-year study of the treatment of 172 patients.

Average age at the onset of the blood disease in the series of patients was 50.7 years, and the average age of those patients who died was 67 years. This is nearly a normal life expectancy for persons in this age group, Dr. Lawrence points out.

Demonstration of Organic Disease in "Functional Illness" By Skull X-rays

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In the yearly admissions to the Elgin State Hospital, over one third are consistently found to be organic disorders. The largest groupings in the order of frequency and psychosis with cerebral arteriosclerosis, syphilitic meningo-encephalitis, senile psychoses, and alcoholic psychosis. In the majority of these cases the diagnoses are usually arrived at from the anamnesis, the physical and psychiatric examinations, and the clinical laboratory findings, and, as a rule, the same applies for such conditions as convulsive disorders and epidemic encephalitis.

A variety of organic conditions, however, demand the services of roentgenology for establishing or confirming diagnoses, including, for example, brain tumors, skull injuries, osteomyelitis, etc., in which the value and use of skull x-rays are clearly and widely established and comprise the bulk of skull x-ray work in a large mental hospital. There is, however, a certain group of cases in which the skull x-ray has been instrumental in introducing certain difficult problems in our work. Four such cases are presented here.

CASE 1: C.R. A 54 year old, married, white female was admitted because of hallucinations and delusions, noisiness and combativeness. She had previously written a number of movie scenarios and began to have ideas that someone was stealing her stories, that people were following her, and complained of voices that were forcing her to join secret organizations. Her mental illness was considered characteristic of paranoid schizophrenia and at the diagnostic staff Meeting in June, 1941, was diagnosed as dementia praecox, paranoid type. Her condition remained unchanged in spite of electric shock treatment and a course of insulin shock therapy, and she continued to hallucinate and have periods of excitement. One afternoon in 1945, she suddenly had vomiting spells and severe convulsions. An electroencephalogram taken at that time showed some slow wave activity but neurological examination showed no objective findings other than slight adiodochokinesis. In the x-ray taken at that time there were large areas of decalcification, well demarcated in the occipital and parietal bones and perhaps

to a lesser extent in the frontal bone. (Figure 1): Re-examination after two years reveals an extension of the process, particularly over the parietal area. In the P. A. view, the process is seen to involve both sides of the skull, predominately the right. (Figure 2): Two diagnostic possibilities are considered — 1. Xanthomathosis or Hand-Schiller-Christian disease, and 2. Osteoporosis circumscripta cranii.

Although most commonly seen in children, xanthomathosis or Hand-Schiller-Christian disease is known to occur in adults. This disease is considered to be a disorder of fat metabolism in which masses of reticulo-endothelial cells become loaded with fat in the tissues surrounding the blood vessels. As a result of the growth of these reticulo-endothelial cells in the marrow spaces, the bone trabeculae and cortex become atrophied and degenerated. These areas of bone erosion are usually distinct and clear cut, as seen here.

In summarizing the few studies reported of the nervous system in cases of Hand-Schiller-Christian disease, Wilson and Bruce state that the lesions consisted of patchy demyelination throughout the white substance of the brain mostly in the parietal and temporal regions, but also in the optic radiation, corpus callosum, internal capsule, basal ganglia, the substantia nigra, cerebellum, and its peduncles, and in the pyramid. The demyelinate plaques were filled with compound granular corpuscles and giant glia cells. The disease is usually considered to be a



Figure 1. (C.R.) Lateral view showing large areas of decalcification, well demarcated in the occipital and parietal bones.



Figure 2. (C.R.) P.A. view. Decalcified areas involve both sides of the skull.

symptom-complex of skeletal change, exophthalmos and diabetes insipidus, in which one or more features may be manifest, although bony defects in the skull are found in practically every case. Osteoporosis circumscripta, on the other hand, is considered by some to be a rare type of bone disease and by others as representing the osteolytic stage of Paget's disease, in which case the pathological change would consist of a transformation of the blood forming elements of the bone marrow into vascular connective tissue with resorption of bone. As yet, however, no evidence of bone regeneration has been detected and x-ray studies of the extremities show no evidence of bone pathology, the lesion being limited to the skull.

The serum phosphatase at the present time is 3.2 units. Spinal fluid examination shows normal findings, blood pressure 154/80; B. M. R. minus 19 and minus 17; total serum protein 8.4; serum albumen 5.3; serum globin 3.1; A. G. ratio 1.7; blood cholesterol 198.6 milligrams; blood calcium 12.1 milligrams; and phosphorus 2.5 milligrams. The electroencephalogram now reveals slow wave activity, some petit mal variant and is suspicious for abortive grand mal.

Although there are several reports of psychosis and other mental changes developing in case of Paget's disease, we have been unable to find reports of mental change occurring in cases of osteoporosis circumscripta cranii. The fact that the osteoporotic

process has been of relatively long duration without manifestation as yet of new bone formation along with the presence of a normal serum phosphatase level leads us to favor a diagnosis of xanthomatosis in this case. The skull x-ray picture, while not in itself conclusive, adds something to the original diagnosis which might help us explain the progressive nature of the disease process. The patient has been going down hill, has become untidy, breaks chairs, expectorates on other patients.

CASE 2: M. L. (Figure 3): This is the skull x-ray of a 72 year old, single female who, as a young woman was considered outgoing, friendly, religious, and had made a fairly good life adjustment as a milliner. In 1930, following the death of her parents and the loss of her life savings in a bank failure, she became increasingly depressed and despondent, and threatened to commit suicide and was finally hospitalized in 1936 at which time a diagnosis was made of agitated depression. Instead of improving, she became domineering and dictatorial, and after a period of time she was placed in an institution. She began to throw things out of the windows, marked up the walls, locked a sister in her room, and finally attempted to choke one of her fellow roomers.

She was admitted to the Elgin State Hospital in October, 1940, found to be obese, weighing 210 pounds, blood pressure 150/90; otherwise physical and clinical laboratory findings were negative. Psychological testing showed the patient to be functioning with slightly less than average mental efficiency. There appeared to be some emotional flattening and in the staff meeting in April, 1941 several diagnostic possibilities were considered including dementia praecox, involutional psychosis, cerebral arteriosclerosis, and a compromise was made of undiagnosed psychosis.

She remained institutionalized and was placed on occupational therapy but episodes of agitation and restlessness persisted. In 1943 she developed a sudden, short, unexplained episode of vomiting and symptoms of mild shock and a temperature of 103°. In November, 1946 she began to complain of dizziness, generalized weakness and soon become unable to walk. The skull x-ray reveals a tremendous hyperostosis which has undoubtedly developed over a considerable period of time with formation of irregular stalactites of sclerotic and spongy bone involving the inner table, particularly in the anterior cranial fossa, projecting irregularly and diffusely into the cranium. (Figure 4): An A. P. view showed the process to be symmetrical, equally involving both sides. Diagnosis: hyperostosis frontalis interna, chronic, severe. At the present time the patient is bed ridden, irritable, and sometimes unco-operative, but is coherent, in fairly good contact, and fairly well oriented. Skull circumference measures 23½ inches, pupils react somewhat sluggishly to light, fundi show some vascular changes compatible with her age, blood pressure 125/80, harsh systolic murmur over the apex, impaired hearing in the left ear with chronic thickening of the drum; moderate arthritic deformities of the fingers with ulnar deviation and generalized weakness of muscle power,

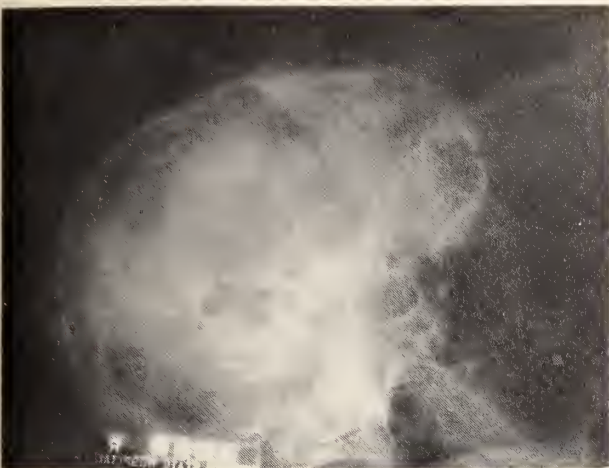


Figure 3. (M.L.) Severe hyperostosis frontalis. Stalactites of sclerotic and spongy bone project from inner table into cranium.



Figure 4. (A.K.) Paget's disease. Bony thickening with enlargement of sella turcica.

but no other neurological signs. Serum phosphorus 3.5 mgm., serum phosphatase 2.0 units.

In this case, after 17 years of illness, considerable more certainty can be established now in relating, or at least associating the progressive mental disorder with the findings that have been revealed by skull x-ray.

CASE 3: A. K. A 62 year old, white female was diagnosed as psychoneurosis with reactive depression. In 1934 she entered a Chicago hospital complaining of "dizziness, nervousness, and pains in her head." In 1940, she entered a clinic and on physical and roentgenological examination was found to have Paget's disease with anterior bowing of the femora, asymmetry of the pelvis, and deformity of the humerus. It was at this time that she entered a mental hospital with a rather sudden development of depression, agitation, self-accusatory ideas, and a suicidal attempt. She improved to some extent from her mental disturbance and was soon discharged with a diagnosis of involutional melancholia, depressed type. In 1946, she again became suddenly agitated and developed paranoid ideas, feeling that people were plotting against her. Aside from the deformities mentioned above, the physical and laboratory tests were essentially negative. The skull film, however, although it showed some rather marked uniform thickening of the tables with obliteration of the diploe, showed also some enlargement of the sella turcica, which along with the bony thickening, resembles in some respects an acromegalic skull. (Figure 4): Although the changes are most likely those of Paget's disease, it is known that some cases of acromegaly may show a skull picture resembling Paget's disease. Although Sir James Paget in his original description stated that the mind remains unaffected even when the skull is highly thickened and all of its bones exceedingly altered in structure, there have since been several reports of mental changes occurring in Paget's disease, varying from irritability and depression to psychosis.

As in other cases, it is perhaps difficult to correlate the mental picture with the organic process. From the psychiatric approach, sufficient dynamic material was brought out in this case to lend plausibility to a diagnosis of psychoneurosis. It is conceivable that the progressively crippling and disfiguring affects of such a disease might contribute to the development of a mental disturbance. However, as in the other case, the organic changes obtrude themselves sufficiently to warrant some recognition on a purely organic basis.

CASE 4: S. J.: A 24 year old, white male had been employed as a machine operator helper in a large factory. One day he wanted to put his hands in the machine saying that God would stop the machine and prevent him from getting hurt. He soon became irritable, developed ideas of reference, and expressed other peculiar ideas. He was a breech presentation at birth and was delivered by instruments, his nose was injured, and became permanently deviated to one side, and the patient has always been sensitive about appearance. As an infant he cried hard and frequently became cyanotic; as a child he suffered temper tantrums but was able to complete three years of high school. His work record was erratic until the above episode, when he was committed to the Elgin State Hospital. Physical examination was negative except for some asymmetry of the head and nose. After a period of time the patient improved to some extent and at the staff meeting diagnoses were considered, including schizophrenic reaction, psychopathic personality with excitement, and psychoneurosis with an acute excited state. After further improvement, he was discharged.

However, he had difficulty in getting along, was at times despondent and soon insisted that he had "Jesus' blood" in his veins, became disturbed, and began smashing windows. He was readmitted in 1945, professed total amnesia and blindness, and



Figure 5. (S.J.) Cranio-stenosis. Exaggerated convoluted markings involve bones about anterior cranial fossa. Shortening of A.P. diameter. Tendency to towering.

was a behavior problem. He was excited, rambling in his stream of speech, destructive and irascible. The nature of the psychosis was not clear and he was considered to be a psychopath in the broad sense of the term, and was diagnosed as psychosis with psychopathic personality. An initial course of electric shock treatment resulted in a temporary semi-stuporous state, and later upon administering the first treatment of a retreat of electric shock, he became markedly apneic and cyanotic so that artificial respiration had to be administered. It was then that organic brain disease was for the first time considered. The skull x-ray taken in February, 1947 reveals in the lateral view (Figure 5) the presence, first of a clearly defined exaggeration of the convoluted markings involving the bones about the anterior cranial fossa. The margins of the depressions being clearly outlined, and the bony structure of the base being clearly defined, it can be assumed that we are dealing with old pressure scars arising from an increased intracranial pressure that was manifest at some earlier period and which has since become compensated. In addition, it was noted that there was shortening of the A. P. diameter of both anterior and posterior fossae, with a compensatory tendency to towering. On the P. A. view there was absence of the frontal sinuses and there was definite asymmetry of the skull. Therefore, from the information obtained from the x-rays, it was felt that this patient suffered at one time from cranio-stenosis, a condition in which two or more cranial bones unite prematurely, becoming fused during infancy. In such a condition, the skull is unable to expand normally to accommodate the growing brain and hence the development of increased pressure.

At the present time, the patient's behavior is essentially unchanged, but he remains oriented and coherent; admits having had headaches which he describes as "throbbing like your heart beating in the cranium." Spinal fluid pressure is normal and

there is no evidence of papilledema or disc atrophy. The neurological examination was essentially negative except for questionable impairment of position sense.

Again, in this case, we feel ourselves permitted to transgress the realm of chance or coincidence that one disease should be merely superimposed upon the other, and predicate that the disease process as observed on the one hand by the psychiatrist and on the other hand as observed by the roentgenologist are but different manifestations of the same disease.

DISCUSSION

We have presented case histories of four patients who were considered to be suffering from mental illness of a "functional" nature, but whose skull x-rays revealed the presence of significant organic pathology. An attempt is made to associate the mental symptoms with the disease process as revealed by the skull-x-rays.

"Organic" disease is established by the identification of qualitative or quantitative alteration of some part of the body structure by existing methods of investigation and when such qualitative or quantitative alteration of some part of the body cannot be identified by the existing methods of investigation, the disease manifestation is considered "functional". The arbitrariness of such an arrangement is self-evident. It was none other than Freud, for example, who wrote "the edifice of psychoanalytic doctrine which we have erected is in reality but a superstructure which will have to be set on its organic foundation at some time or other; but this foundation is still unknown to us."

While we cannot categorically state that the symptoms manifest in these cases are due to brain destruction, we are nevertheless reminded by the skull x-rays of the arbitrariness and fallaciousness of dichotomizing mental disease into "functional" and "organic" categories.

SUMMARY

From a survey of skull x-rays in a large state hospital, somatic disease is demonstrated in the skull x-ray of four patients in whom the disease process was diagnosed as a functional disorder. An attempt is made to associate the mental symptoms with the disease process as revealed by the skull x-rays, emphasizing the inseparability of the functional and the organic approach.

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Cholecystitis

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The following observations were made following the study of two hundred and ten cases of cholecystitis associated with cholelithiasis. These cases occurred in a two year period. In this series of operated cases, it was noted that the ratio of females to males was three and one-half to one. Eighteen cases had a stone in the common duct. Three cases had stones in the hepatic ducts.

Incision: — Two incisions were used in this series of cases. The transverse incision was used in one hundred and thirty-one cases, and the rectus splitting incision in the remaining seventy-nine cases. The factors which determined the selection of the incision were: 1. The size and weight of the patient; 2. Results of the Roentgenological studies; 3. History.

Patients that were exceptionally large structurally — (over 6 feet) — and those patients that were obese, were candidates for the transverse incision. In those cases where the roentgenological studies revealed the biliary tract to be distorted or displaced, the transverse incision was also the incision of choice. The authors feel that previous surgery involving the right upper quadrant is a definite indication for using the transverse incision. Individuals who were small structurally and not obese were considered for a muscle splitting incision. Then too, the muscle

splitting incision was believed to be the incision of choice in cases that necessitated emergency surgery, and when the possibility of drainage rather than removal was present. Operative procedures involving the common duct were performed through a transverse approach. The authors are of the opinion that the transverse incision in the majority of cases is very satisfactory.

Closures: — All cases were closed with an interrupted technique. This procedure, although time consuming, is felt by the authors to be the closure of choice. Chronic catgut was used in all of the cases. No post-operative hernias occurred.

Roentgenological Studies: — All operated cases had roentgenological studies completed before surgery. Following x-ray studies one hundred and forty cases (66.6%) showed stones. Fifty-one cases (24.38%) showed a non-functioning gallbladder. Eleven cases (5.25%) of the series were impaired functioning gallbladders. At surgery revealed: 1. Five cases, a diagnosis of chronic cholecystitis was established; 2. Three cases, strawberry gallbladders were found; 3. One case, the gallbladder was a shell of calcium carbonate; 4. Two cases with previous found, but no stones could be demonstrated. roentgenological studies had shown evidence of

stones and at surgery chronic cholecystitis was

In nine cases (4.28%) the roentgenological studies revealed a normal gallbladder. At surgery, seven cases (of the above group) had stones and two cases exhibited chronic cholecystitis without stones. In this group all of the nine cases had a long established history of gallbladder disease. Seven of the above group gave a history which dated more than eight years prior to surgery. Three cases had at various times been clinically jaundiced.

Three cases of common duct stones were not visualized on x-ray. One case of common duct stone was visualized on x-ray.

In four cases of chronic cholecystitis with stones, roentgenological findings demonstrated the presence of a duodenal ulcer.

In one case of chronic cholecystitis with stones, roentgenological studies revealed an active peptic ulcer. In two cases of chronic cholecystitis with stones, roentgenological studies revealed colitis.

In one case of chronic cholecystitis without stones a duodenal ulcer was demonstrated.

Four of the five cases of duodenal ulcers that were associated with cholecystitis showed clinical improvement immediately after surgery.

Spontaneous Passage Of Stones: The spontaneous passage of gall stones from the gallbladder and the cystic duct occurred in two cases. In both of these cases the existence of multiple small gall stones had been established by roentgenological studies, two and three months respectively prior to surgery. Apparently the stones in these cases were spontaneously passed into the duodenum. At surgery both cases revealed evidence of chronic cholecystitis but no stones could be demonstrated in either the gallbladder, common duct, or hepatic ducts. In view of the existing possibility of spontaneous passage of gall stones into the duodenum, it would seem advisable to repeat roentgenological studies on patients that had had a diagnosis of cholelithiasis substantiated by roentgenological studies three to four months prior to surgery. The use of anti-spasmodics, cholecystanitics and choleretics would seem to be indicated in all cases exhibiting gall bladder stones that are not associated with obstruction.

The Management Of Chronic Gallbladder Disease: The management of chronic cholecystitis with or without cholelithiasis, consists of proper medical preparation followed by surgery.

It is felt that if symptoms are persistent, prolonged waiting only aggravates the existing condition. Following a trial of medical management, the patient who does not respond satisfactorily, then should be prepared for surgery. Removal of the gallbladder in these cases is thought to be the treatment of choice. Very few cases of chronic cholecystitis with or without stones were drained. The authors believe only cases that are associated with extreme emaciation, shock, or superimposed upon other infections or pathological entities should be drained. The technique of cholecystectomy can be varied with the presenting pathology. The question as to whether or not the surgery should be accomplished from below upward or from above downward continues to be a matter of individual preference. In this series of cases, the latter technique was used.

Management Of Acute Gallbladder Disease: The management of acute cholecystitis with or without cholelithiasis is not clearly defined. The authors feel that early surgery is indicated and that cholecystectomy rather than cholecystostomy is the procedure of choice. The latter procedure being reserved for those cases that exhibit severe complicating factors.

In those cases of acute cholecystitis that are not seen until a period of ninety-six hours has elapsed since the onset of the episode, the best results are probably obtained by employing medical management provided the patient is improving clinically. Surgical interference after 96 hrs., when necessary, should be drainage rather than removal of the gall bladder.

The medical management of acute cholecystitis, as well as chronic cholecystitis is extremely important. The addition of chemotherapy coupled with the ambiotics has aided tremendously in reducing mortality and morbidity of biliary tract surgery.

Cholecystitis And Pancreatitis: Three cases (1.45%) showed evidence of chronic interstitial pancreatitis. No attempt was made to drain the pancreas. The authors do not feel that this pathological condition requires surgery on the pancreas itself. In these cases the common bile duct was opened and drained. The gallbladder was removed in two cases and in one the gallbladder was not removed. It is felt that the gallbladder itself is a focus of infection and it should be removed unless the patient's condition

contraindicates this procedure. All three cases recovered within a satisfactory period. The diagnosis of chronic interstitial pancreatitis is seldom made before surgery. In two of the above cases the serum amylase was only slightly elevated at surgery. All of the three cases of chronic intersitital pancreatitis were associated with cholecystitis and cholelithiasis. During the past few years considerable work has been done regarding the surgery of the pancreas. The authors are of the opinion that surgical procedures other than those enumerated and described above are both hazardous and unnecessary.

Pathology Of Cholecystitis: Unfortunately it is often extremely difficult to judge accurately the degree of the existing pathology in billiary tract disease. The symptomology of biliary tract pathology does not always portray an adequate picture of the existing underlying pathology. The degree of infection and the amount of vascular changes are not accurately reflected by either the symptoms or the physical findings. Some patients exhibited only moderate symptoms and at surgery the gallbladder was found to be highly pathological and technically difficult. The problem of diagnosis of biliary tract pathology, not only involves the biliary tract itself, but also the multitude of surrounding structures. It is extremely difficult to foretell the impending perforation of a gallbladder. Clinical findings and their interpretation must supercede laboratory findings in this particular instance.

Analysis Of Results: The relief of symptoms in the majority of patients, was thought to be more complete in those cases that at operation exhibited stones. There were no cases of evisceration in this group of operative cases. There were no deaths in the operative group. There were no vascular accidents (thrombosis, thrombophlebitis or embolic phenomena) in this group of cases. There was one case of sub-diaphragmatic abscess.

Symptoms Of Biliary Tract Disease Following Cholecystectomy: This subject is often referred to as the "post-cholecystectomy syndrome". It is apparently common and the symptoms of this syndrome are both severe and persistent. This subject has been discussed frequently by many authors during the past few years.^{1, 2, 3, 4} The etiology of this syndrome is not completely understood. It is thought that a number of con-

ditions or group of conditions are capable of producing this symptom complex. A series of eight cases of this category were operated. These eight cases had previously undergone cholecystectomy from three to five years prior to this examination. None of these cases showed stones on roentgenological examination. Roentgenological examination was repeated after a three month period had been allowed to elapse. Roentgenological examination at this time was also negative. At surgery two cases had stones in the right hepatic duct. The stones in both cases were multiple and small. One case had a stone at the sphincter of Oddi. Two cases had a demonstrable remnant of the cystic duct which had become distended and closely resembled a small gallbladder. One case had an incomplete stricture of the common duct. Two cases proved to have multiple adhesions involving the duodenum and the liver. In view of the diversified findings at surgery it must be concluded that no single entity is the responsible etiological factor in producing this symptom complex.

Several investigators are of the opinion that the above symptom complex can be explained on the basis of trauma to the nerve fibers (primarily those of sympathetic origin) which traverse the common duct and the cystic duct and innervate the gallbladder. The anterior and posterior plexuses lie in the vicinity of the cystic duct. A ligature placed around the cystic duct would traumatise these nerves. Various workers have expressed the opinion that under these conditions a neuroma may form. Thus any nervous stimulation which results from movement, of the common duct, could cause this "post-cholecystectomy" syndrome to be elicited. However, this condition which possibly accounts for the production of some cases of "post-cholecystectomy syndrome", is probably not the sole etiological factor. If care is used to strip the cystic duct of all extraneous tissue before the ligature is applied, this complication can readily be avoided.

Emphasis has been properly placed upon the dangers of ligating the cystic duct at a point which is too close to the junction of the cystic duct with the common duct. It is very important that strictures of the common duct be avoided. However it must also be stressed that ligation of the cystic duct at a point too far removed from the junction of the common duct with the cystic

duct should be avoided. For this procedure frequently results in "post-cholecystectomy syndrome" and at re-operation stones may be found in the remnant. The necessity of adequately cleaning the field, before closure, must be considered as being important. A clot of blood and tissue debris aids in the formation of adhesions which in turn may mar the results of the surgery. This refers primarily to duodenal adhesions.

CONCLUSIONS

1. A report of two hundred and ten cases of cholecystectomy is presented.
2. The criteria for selection of type of incision are mentioned.

3. The roentgenological reports on the series is analyzed.

4. The need of repeating roentgenological studies before surgery on patients that have been studied two to three months before being admitted to the hospital.

5. The association of gall bladder disease and its apparent relationship with pancreatitis is stressed.

6. Etiological factors thought to produce the "post-cholecystectomy" syndrome, are discussed.

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Significance of Rectal Bleeding and the Importance of Diagnosing Early Cancer of the Colon

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Among the laity the colon is the most misunderstood organ in the body. It is the one structure they are certain they know all about. They ascribe all manner of ills to it and prescribe for themselves innumerable home and drug store remedies without the slightest compunction. Every person who is not an M.D. is certain that he or she is a competent "colon specialist on minor ills".

This attitude by the laity is disturbing for two important reasons: First, it has given rise to misconceptions about the functions of the colon and about the significance of symptoms caused by disorders and diseases affecting it. Second, it has encouraged self medication and treatment.

These two facts result in delay and in procrastination by these people at a time when a

cancer is beginning, and is curable and at the time when it can be found by careful examinations. The key to the cancer problem of the colon thus is in the hands of the patient who is over thirty years of age. He must be taught that it is the minor symptoms and the minor changes in bowel habits which give the first warning of an early cancer. These are the symptoms for which he has been accustomed to treat himself, but for which now he must seek medical advice and examination. Only in this way can cancer of the colon be detected in the early, in the operable, and in the curable stage.

The most important of the methods for examining the colon for cancer is the barium enema. Time does not permit a description of the details of this examination. It should suffice to say that it must always be done with the greatest regard for accuracy. I do not hold that only a radiologist is capable of doing this examination, but I do hold that a physician who assumes this re-

Presented before the General Assembly, 109th Annual Meeting of the Illinois State Medical Society, May 16-18, 1949.

sponsibility must be able to do it equally as well. Otherwise he is subjecting his patient to an inferior examination and he is placing himself behind a screen of false security. It is not the x-ray equipment that makes the examination, but the trained physician who operates it. As for equipment, high grade tools in the long run help to do a better job and for that reason, the roentgen apparatus should be up to date with a capacity of at least a 100 milliamperes and fitted with a Potter-Bucky grid. It should be capable of making exposures at one-half second and, of course, equipped for fluoroscopy.

There is no definite clinical picture in cancer of the colon, yet 97% of these patients will have one or more of the symptoms listed as indications for a barium enema.

1. The most important is rectal bleeding. Every patient who passes blood or has streaks of bright red blood in the stool must be given a barium enema.

2. Changes in bowel habits need not be marked. Even the slightest change in patients over forty years of age requires a barium enema if early cancers are to be found. I can't emphasize this too strongly.

3. Marked constipation or diarrhea or combination of both are often the first signs of colon disease or of a well developed cancer. Notice I say "well developed."

4. Pus or mucous in the stools requires a barium study to determine the location and extent of an infection or of an ulcerated tumor.

5. Abdominal distention is significant. It may be the first indication of an obstructive cancer.

6. Cramping pains in the abdomen can't be ignored for they, too, may mean the beginning of an obstructive cancer and are cause for a thorough examination of the colon.

7. Unexplained loss of weight can be caused by small ulcerated polyps as well as from the slow bleeding of a malignant growth.

8. One of the most common sites of abdominal tumors is the colon.

9. Hemorrhoids, in themselves, are an urgent reason for examining the colon. You have all seen patients who had operations for hemorrhoids because of rectal bleeding and who returned some months later with a cancer at a higher level, well advanced, and in an incurable stage. These

could have been found by a barium enema and a proctoscopic examination and successfully treated at the time of the hemorrhoidectomy.

Only about ten patients out of every one hundred examined by a barium enema have a demonstrable lesion of any kind. This is not a disappointment, because the bigger the percentage of negative examinations, the greater will be the chance of finding early cancers, and that is what is important. Don't wait for the textbook symptoms to develop before acting, order the barium enema on suggestive symptoms!

Cancer of the colon is a common disease. It is the second most frequent of all cancers of the gastro-intestinal tract and is exceeded only by cancer of the stomach. It forms about 7% of all cancers.

Approximately 50% occur in the rectum and sigmoid colon. They can be seen on proctoscopic examination. About 12% of these can be felt by a digital examination. Redundant and overlying loops of sigmoid make the radiographic examination very difficult and require every effort on the part of the observer to avoid overlooking a small growth. This is the hardest segment to examine; yet it is the most frequent site for cancers. This fact alone explains why an examination of the colon is not complete unless a digital exploration, a proctoscopic study, and a barium enema are included.

There are four types of carcinoma of the colon:

1. The medullary or nodular type which forms the greatest percentage. They are usually large, bulky, fungating, friable, and in the proximal part of the colon. They ulcerate early, metastasize late, and are slow to produce signs of obstruction as the fecal stream is liquid in the right colon and the diameter of the bowel is large.

2. The scirrhous type forms about 20%. They usually appear in the distal colon, are annular, encircle the lumen and are prone to produce obstruction as the fecal stream in the left colon is firm and the diameter of the bowel is smaller.

3. The colloid or mucoid type is similar to the medullary.

4. The polypoid type usually degenerates from polyps. Many pathologists believe that polyps of the colon constitute a definite pre-cancerous lesion, and especially so when accompanied by an inflammatory disease of the colon.

Microscopically about 98% of all types of colon cancers are adenocarcinomas. They begin as a disease of the mucosa and remain limited to a small segment of the colon. Consequently, the margins of the cancer begin and end abruptly. This characteristic provides a major sign in the radiographic differentiation between malignant growths and inflammatory diseases.

CONCLUSIONS

1. Cancer of the colon is common.
2. The best protection afforded the laity is the complete periodic health check-up.

3. The surgical treatment of cancer of the colon has progressed ahead of our consistent ability to diagnose it in the early stages.

4. The most urgent phase in the problem of cancer of the colon is the education of people over 35 to seek medical attention for minor changes in their bowel habits and the elimination of self medication.

5. The next most important step is the education of the physicians to institute examinations of the colon for suggestive symptoms and not to wait for the appearance of the advanced signs of cancer.

STUDY EFFECT OF HAY FEVER DRUGS IN EPILEPSY

Study of the effect of two widely used hay fever drugs, benadryl and pyribenzamine, on epilepsy shows that benadryl decreases the frequency of seizures of the petit mal form of the disease, according to a report in the Sept. 3 Journal of the American Medical Association.

Petit mal is the less severe type of epilepsy in which the sufferer is dazed for a few seconds at a time.

No claim is made by Drs. John A. Churchill and George D. Gammon of the University of Pennsylvania, Philadelphia, who reported on the drugs, that benadryl can be used as a treatment for petit mal at present.

The study shows further that both benadryl and pyribenzamine are capable of inducing more severe seizures in patients with certain brain lesions, and that pyribenzamine also increases seizures of petit mal epilepsy.

Carefully documented studies on the use of streptomycin in clinical tuberculosis have established the fact that this new anti-bacterial agent exerts a beneficial therapeutic effect on several forms of tuberculosis. At its best, however, it is only an auxiliary part of the general treatment in most forms of the disease, and is partially dependent, for its full effect, upon other more common therapeutic measures, such as bed rest, pneumothorax, and chest surgery. (Recommendations of the Subcommittee on Streptomycin of the Expert Committee on Tuberculosis of the World Health Organization, January, 1949)

Of the deaths from respiratory tuberculosis in 1947, 32.1 percent occurred outside of institutions, and 67.9 percent occurred in institutions. Of the total respiratory tuberculosis deaths, 25.8 percent occurred in general hospitals, 30.9 percent in tuberculosis hospitals and sanatoria, and 9.0 percent Pub. Health Rep., April 1, 1949.

CASE REPORTS



Fulminating Eclampsia Associated with Fibrinogenopenia and Hemorrhage

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The onset of pre-eclampsia and eclampsia always was, and always shall be a matter of grave concern for both the patient and her physician; and the safe delivery of these patients without sequelae is the goal desired. With the advent of adequate prenatal care, and the better patient-physician relationship, the mortality from toxemia has improved, but the incidence has not been appreciably altered. For the period of 1931-1945 incl. the incidence of eclampsia at Lewis Maternity Hospital¹ has been 51 cases or 0.18%. This is the same incidence reported from Chicago Lying-In Hospital² during the same time interval. Within the past year however, we have had two fulminating cases that had a most rapid course complicated by a generalized hemorrhagic diathesis, the most notable feature being a fibrinogenopenia with resultant inability of the

blood to clot. Because of the rarity of this complication, the following two cases are reported in almost complete detail.

Case 23,225 is that of a 24 year old Gravida 1 Para 0 white female whose E.D.C. was Aug. 11, 1947, and was first seen in the clinic on Feb. 24, 1947. Past history was negative except that she had been told she had hypertension following routine physical examination in April, 1945. She was admitted to another hospital at that time where her blood pressure varied from 170/90 to 200/120. B.M.R. varied from plus 11 to plus 35 on five tests, but it was the impression of the attending internist that the elevated B.M.R. was due to an anxiety state and not a true thyrotoxicosis. Physical examination: Blood pressure 140/90, head, chest, abdomen, and extremities normal. Lab. Rbc 4.38 million, Hb. 11.6 gm, 82%; Group A, Rh positive; Kahn neg.; and urine normal. The patient had no

Presented before the 594th regular meeting of the Chicago Gynecological Society, May 21, 1948.

subjective complaints, she was admitted to the hospital on two occasions because of elevation of blood pressure to 152/110. The medical consultant noted arteriolar narrowing of the retinal vessels without any tortuosities or A.V. nicking. I.V. pyelogram showed a normal left kidney, and an obscured right kidney. On May 21, 1947 the urine had a one plus albumin, 50-60 wbc, and Gram negative rods in the sediment. N.P.N. was 44, uric acid 3.4, and Cephalin flocculation one plus in 48 hours. Patient was afebrile but was placed on 1½ grams of Streptomycin daily, sedation, and a salt free 85 gram protein, 1800 calorie diet. During the next three days there was a decrease in the wbc in the urine. Total weight gain to May 22 was 8 pounds above her normal of 98. On May 22 the blood fibrinogen was 0.56 grams, urea clearance 115% 1st hour, and 92% the 2nd hour. On May 25, the blood pressure had risen to 170/100, N.P.N. 59, and uric acid 4.05. She was given 20% glucose in water in an attempt to improve elimination, but within 10 hours the N.P.N. had risen to 64, and the patient began to complain of visual disturbances. Because of the progression of findings, a low cervical section was done under local anesthesia in the 29th week of gestation and patient delivered of a 2 pound infant that lived for 12 hours. The blood pressure was sustained during the operation from 180/130 to 210/140, and patient had a mild convulsion during the operative procedure. Blood loss was estimated at 250 cc. Three hours postoperative the pressure dropped to 100/65, pulse 80, and the patient was rational. There was no evidence of bleeding, so patient was given 1000 cc of plasma and 1000 cc of 10% glucose. During the next four hours the pressure did not rise, and then the patient began to bleed from the vagina, abdominal incision, and all sites of vena puncture. Despite infusion of blood and other additional shock measures, the patient expired an hour later, remaining rational to the time of exodus. Blood that had passed from the vagina was still unclotted 36 hours after death. Fibrinogen determination of this blood was 0.120 grams. Permission for only biopsy of the kidneys was obtained. The right kidney measured 4 cm. in size, and the left was slightly enlarged.

Microscopic Examination: Left Kidney: There was marked swelling of the convoluted

tubular epithelium, and the cytoplasm was granular. There was some karyolysis. Rare mitoses were present in the epithelium of the convoluted tubules. Protein precipitate in the lumina. Few tubules were seen containing brown or pink casts. Rare minute cortical scar enmeshing a few atrophic tubules were infiltrated by lymphocytes. The glomeruli showed no significant changes. Rare arteriole showed a thin encircling band of hyaline beneath the endothelium or small hyaline deposits along only part of the endothelial lining. There was no arteriolonecrosis or hyperplastic arteriosclerosis. There was thickening of the intima of small arteries by elastic fibrils. Brown pigment was seen in some of the epithelial cells of Henle's loops.

Right Kidney: Large scar replaced part of the parenchyma from pelvis to capsule. In the scars groups of small and large cast filled tubules, simulating thyroid tissue in appearance, were seen. In these same areas, there were notable vascular changes consisting predominantly of fibroblastic intimal thickening with collagen deposition. Elastic fibrils were intermixed in some arteries. These changes were practically limited to vessels in the scars. There was local infiltration of the scar by lymphocytes. The more normal portion of the kidney tissue in the section was similar to that described in the left kidney. There was a rare hyalinized arteriole in this portion. There was massive infiltration of the sub-epithelial tissues of the pelvis by lymphocytes and plasma cells. The epithelium of the pelvis was desquamated.

Microscopic Diagnosis: Chronic pyelonephritis with contraction of the right kidney, minimal benign nephrosclerosis right and left kidneys, Nephrosis.

Case 23,110 is that of a 21 year old Gravid 1, para 0 Mexican girl whose E.D.C. was Sept. 7, 1947, and who was delivered by Cesarean section Sept. 18, 1947. She registered in our clinic on Jan. 24, 1947. Physical examination, and past history were normal. Up until the time of admission on Sept. 18, patient had had a gradual weight gain of 15 pounds, and blood pressure and urine analysis were always normal. On the evening of admission (3 days after last clinic visit) patient phoned complaining of epigastric pain, and was advised to enter the hospital. At time of admission, one hour later, blood pressure

was 170/105, urine 4 plus albumin, N.P.N. 43, uric acid 4.7, bleeding time 2.5 minutes, and clotting time plus 11 minutes. She was given morphine gr. $\frac{1}{4}$, 5 grams of 50% Magnesium sulfate I.M., and 300 cc 50% glucose I.V. Urinary output was 60 cc first hour, 10 cc second hour, and 5 cc the third hour. Despite additional sedation the pressure rose to 210/140, and the uterus went into a state of sustained contraction with a slowing of the fetal heart tones. Because it was believed that the patient had a toxic separation of the placenta that was progressing to a fulminating eclampsia, it was decided to section the patient as soon as 1000 cc of blood were obtained from the bank. She was digitalized by the intravenous route, and fortified with 40 mgm of Vit. K. Funduscopic examination revealed marked arteriolar spasm in both eyes. Three hours after admission patient had her first convulsion from which she did not recover consciousness. A low cervical section was done under local anesthesia $4\frac{1}{2}$ hours after admission and a $5\frac{3}{4}$ pound infant delivered that lived for 40 hours. On opening the abdomen, the uterus was found to be in a tetanic and cyanosed state. The placenta was edematous and had several old and recent small infarcts present, but no evident separation. Following operation the patient had a vaso-motor collapse despite a total of 2000 cc blood, 500 cc 50% glucose, and 100 cc 10% glucose which had been started at the time of surgery. Patient began to bleed from all sites of venapuncture and the incision, and expired $8\frac{1}{2}$ hours after admission to the hospital. Additional blood studies revealed 0.520 grams of fibrinogen at admission and only 0.150 grams % at time of death.

Autopsy revealed multiple and generalized hemorrhages. Liver: Weight 2500 grams. The capsule is smooth and thin. Cut section reveals a distinct yellow opaque parenchyma, irregularly stippled and mottled with dark red blood; and some lobules are free from this stippling. The largest red patch is noted at the attachment of the falciform ligament. Here the capsule of the liver is dark red. Brain: Weight 1680 grams. Skull and dura are normal. In the subarachnoid space over the left cerebral hemisphere and over the cerebellum is a thin layer of fluid blood. There is a moderate flattening of the cerebral convolutions. Moderate cerebellar pressure cone.

A slightly blood tinged water fluid is found in the undilated ventricles. The floor of the fourth ventricle bulges somewhat dorsally and has a bluish hue. Sections through the brain stem reveal beneath the floor of the 4th ventricle in the pons, a mass of blood clot 1.5 cm in diameter. The clot is found in the substance of the pons and in the adjacent portion of the left cerebellar peduncle, as far as the central white matter of the left cerebral hemisphere. Multiple frontal sections through the cerebrum reveal small hemorrhagic patches in the left lenticular nucleus and left internal capsule. Otherwise wet nervous tissue is encountered.

Microscopic Examination: Heart: Essentially negative.

Lung: Congestion of alveolar wall capillaries. Protein precipitate in lumina on some of the alveoli. Small groups of collapsed alveoli near pleura. Several rounded foci composed of caseous material or tubercles centrally and peripherally made up of dense hyaline connective tissue were seen. There were no tubercles around these foci. There were desquamated epithelial cells and clumps of bacteria without reaction in some of the alveoli.

Liver: Small and large groups of liver cells at the periphery of many lobules were absent or replaced by granular eosinophilic debris. There was hemorrhage in these areas. In some neutrophilic infiltration was seen. The rest of the liver cells were swollen. There was some disorganization of liver cell cords away from the necrotic foci (postmortem change).

Spleen: There was congestion and increase in number of neutrophils and macrocytes in pulp. (postmortem change).

Pancreas: Extensive postmortem change.

Kidney: There was precipitated hemoglobin in the collecting tubules, distal convoluted tubules and loops of Henle. Occasional brown cast. There was no cellular infiltration around these tubules or extrusion of casts. A suggestion of thickening of basement membranes in the glomerular tufts was noted. The glomerular epithelial cells were swollen.

Adrenals: Not remarkable. Postmortem change in inner cortex.

Uterus: Few lymphocytes in decidua. Not remarkable.

Breast: Lactation hypertrophy.

Intestine: Autolytic changes in mucosa.

Thyroid: Moderate colloid storage. Foci of small follicles.

Gall Bladder: Negative.

Pons: Scattered areas of hemorrhage, some small. In the grey matter, pale areas in which ganglion cells show degenerative changes and even necrosis were seen. There was increase in microglial cells here (nuclei only visible). There were no typical scavenger cells and no definite vascular change.

Cerebellum: Poorly preserved. Small hemorrhages in central white matter.

Complete Anatomical Diagnoses:

1. Fatty liver with peripheral necrosis and hemorrhage (eclampsia).
2. Toxic nephrosis.
3. Pulmonary congestion and edema.
4. Aspiration bronchopneumonia.
5. Bilateral hemohydrothorax.
6. Hemphydroperitoneum.
7. Cerebral edema.
8. Cerebral hemorrhage, left lenticular nucleus, and internal capsule mild.
9. Massive pontine hemorrhage.
10. Mild sub-arachnoid hemorrhage.
11. Sub-endocardial hemorrhages, epicardium and pleura.
12. Petechial hemorrhages, epicardium and pleura.
13. Septic spleen.
14. Postmortem changes in pancreas.
15. Healed pleuritis, lung bases.
16. Recent cesarian section.
17. Postpartum uterus.

Microscopic Diagnoses:

1. Healing but still active pulmonary tuberculosis.
2. Focal hemorrhagic necrosis of peripheral liver cells in liver lobules.
3. Septic spleen.
4. Probable hemoglobinuric nephrosis.
5. Pontine hemorrhage.

COMMENT

The presence of a hemorrhagic diathesis brought about by pre-eclampsia or eclampsia is rare. However its fatal outcome is common and in a review of the literature back to 1935 I failed to find a case that recovered. Dieckmann³ in his text published in 1941 cites two fatal cases that demonstrated fibrinogenopenia. Kellogg^{4,5}

in speaking of toxic separation of the placenta cites 5 out of 9 fatal cases treated conservatively that demonstrated an inability of the blood to clot, and 5 other cases that were brought to his attention with a similar anomaly. There was no report of blood fibrinogen. Manly⁶ cites 2 fatal cases of toxemia associated with hemorrhage, fibrinogen studies not being done.

The cause of this hemorrhagic complication could be one of many. Normally prothrombin reacts with thromboplastin and calcium to form thrombin, and thrombin reacts with fibrinogen to form fibrin. Anything that would interfere with this chain could thus produce hemorrhage. The Smiths⁷ have demonstrated a fibrinolytic enzyme in toxemic patients, but we do not believe this played the chief factor in the two cases presented. The source⁸ of prothrombin and fibrinogen is the liver. Ham and Curtis⁹ state that fibrinogen depletion and associated hemorrhage may be found in severe liver disease such as acute yellow atrophy, amyloidosis, cirrhosis, fatty degeneration, or when any toxic agent causes severe liver damage. If the destruction is mild, fibrinogen levels are raised. The normal figures^{3,10} for fibrinogen are for the non-pregnant 260 mgm %; range 180-350; normal woman at term, 480 mgm %, range 300-700; and in eclampsia, 600 mgm %, range 360-950. In the cases presented the fibrinogen fell from 560 mgm % to 120 mgm % 4 days later in the first case, and in the second from 520 mgm % at time of admission to 150 mgm % at time of death 8 hours later. In addition both cases showed a marked lowering of the albumin-globulin ratio which also speaks for an impaired liver function. Were it possible for these patients to live sufficiently long for liver function tests, I believe they would show a complete ablation of liver activity. Because the fibrinogenopenia manifests itself by a fatal hemorrhage, it should not be looked upon as a solitary disturbance.

Relative to treatment, we believe they should be delivered as soon as possible since the probable exciting cause is in the products of gestation. The type of delivery should be determined by the conditions present. Since the onset is sudden, and the course rapid, anticipation of this calamity is difficult. Since prothrombin and perhaps fibrinogen disappear from bank blood, fresh whole blood would be preferable. However

here again the time element plays an important role.

The first case was being considered as a possible Goldblatt hypertension because of the associated destruction of one kidney. Since the real proof of this condition is the relief of the hypertension following excision of the diseased kidney, this possibility must remain unanswered. 7449 Cottage Grove Ave.

NOTE: We are grateful to Dr. Dieckmann and his laboratory for doing some of these blood studies, and to Dr. John Sheehan for the pathology studies.

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Multiple Cystic Lymphangiomas of the Omentum

**Edward J. Adamski, M.D., Frank J. Walsh, M.D., Joseph K. Narat, M.D.,
and Arthur F. Cipolla, M.D.
Chicago**

Primary cysts of the omentum are rare pathologic conditions. Gairdner¹ in 1852, was the first to report an omental cyst found at necropsy. Horgan², in 1935, reviewed the literature and found 97 cases reported up to that time. Guernsey³ collected 15 cases from the files of the Mayo Clinic over a twenty-one year period.

Echinococcal and dermoid cysts may occur as primary lesions of the omentum. The development of the remaining group of omental cysts has been attributed to embryologic, mechanical or inflammatory causes but the consensus among contemporary pathologists^{4,5} is that omental cysts are true neoplastic growths similar to cystic lymphangiomas encountered elsewhere in the body.

The cysts may be solitary or multiple, unilocular or multi-locular. In 53 cases collected by Montgomery and Wolman⁶ multiple cysts were present in only five. They vary in size

from being just visible to larger formations containing several liters of fluid which may be serous, chylous or hemorrhagic. Pedunculated cysts have been reported. The cysts may be situated in the mesentery, greater or lesser omentum. The majority of cases have occurred in infants and young children.

Pressure symptoms, such as vomiting, constipation or dyspnea, may occur in the presence of large cysts but small ones usually either cause vague, indefinite abdominal discomfort or remain asymptomatic and are incidental findings at operations or postmortem examinations.

Among the complications torsion, rupture⁷ and hemorrhage⁸ have been reported. Such complications may create a picture of acute abdomen, closely simulating a twisted ovarian cyst or acute appendicitis.

In cases causing clinical symptoms the differential diagnosis should consider cysts of the ovaries, the liver or the pancreas, hydatidiform mole, echinococcus cysts and tuberculous peritonitis. The exact nature of the condition in the

From the Departments of Obstetrics and Gynecology and Surgery, St. Elizabeth Hospital, Chicago.

Presented before the Chicago Gynecological Society, October 15, 1948.

majority of cases can be established only on the operating table.

As far as the prognosis is concerned, the possibility of malignant degeneration should be kept in mind⁹, otherwise the condition may remain asymptomatic for an indefinite period of time unless a complication in the form of a rupture of a large cyst, with or without hemorrhages, or a torsion of a pedunculated cyst takes place.

The treatment is surgical but unsurmountable obstacles to the complete removal of the cysts may be present if the lesion involves large portions of the mesentery and the greater or lesser omentum.

A primigravida (I. P.) aged 23, entered St. Elizabeth's Hospital on April 28, 1947, with the diagnosis of pre-eclamptic toxemia. Her past history offered nothing of importance. The prenatal course was normal until one month before admission when she complained of blurred vision, headaches and edema of the ankles. Her blood pressure rose to 150/90 and albumin appeared in the urine. An attempt to induce labor failed and on May 5, a cesarean section was performed. After closure of the uterus, the obstetrician (F. J. W.) noted numerous cyst formations in the omentum. Further examination showed that countless cysts of various sizes, not exceeding 1 cm. in diameter, were scattered over the lesser and greater omentum and the mesentery of the small intestines. Some were solitary but the majority formed clusters of various sizes. The walls were thin and translucent. Most of the cysts were filled with an amber colored, fluid & a few with blood-stained fluid. On inspection of the involved structures no signs of inflammation were found. There were no adhesions nor exudate in the peritoneal cavity. The inspection and palpation of the abdominal organs failed to reveal any pathologic findings. A biopsy was taken from the greater omentum.

The histologic report, furnished by Dr. J. Kearns, was as follows:

"The specimen measures 15x10 up to 4 cm. The specimen is of sponge-like consistency and contains innumerable cysts which range in size from 0.5 to 1 1/2 cm. in diameter. These cysts are filled with amber colored fluid, in places, and elsewhere with pinkish red fluid, and are arranged in clusters or lobules which are separated by varying amounts of firm, dusky red tissue.

Microscopic examination reveals vessels which are dilated, cystic, lined with flattened, apparently attenuated, and/or columnar, swollen, endothelial cells supported by a variable amount of connective tissue stroma. In the larger vessels the endothelial cells are hyperplastic, forming papillae which, in places, appear to be parts of walls of vessels which were ruptured by the process of cystic formation. The endothelial cells are well differentiated, and show no mitotic figures. In places the supporting stroma is acellular, but there is no evidence of necrosis or inflammation. Chemical examination of the contents of the cysts revealed a small amount of protein and a large amount of cholesterol. The sediment of the fluid shows desquamated endothelial cells, a few red and white cells.

Histogenesis: According to Sabin, the lymphatic vessels first appear as outgrowths from the primitive jugular bulbs and from the great veins in the region of the groin. These evaginations lose their connection with the primitive venous system and only later, after many lymph vessels have developed, establish a secondary connection with the vein. It is highly probable that this tumor originates from some anomaly in the development of the primitive lymphatic spaces."

In the latter part of August, 1947, the patient developed vague pains in the right lower quadrant of the abdomen. She was re-admitted to the hospital, with a diagnosis of chronic appendicitis and an operation was performed on November 7, 1947. The appendix which did not show any gross pathology was removed. The inspection of the abdominal organs showed conditions identical with those found at the previous operation, viz., the omentum and the mesentery of the upper portion of the intestines were studded with numerous small cysts with translucent walls. A specimen 7x3x0.7 cm. was removed. The histologic examination showed the same condition as was noted in the specimen removed at the first operation. The patient was discharged in good condition on Nov. 15, 1947.

COMMENTS

On inspection of the organ or in sections, no signs of an inflammatory process in the omentum could be detected. There were no adhesions. The liver, pancreas, gastro-intestinal tract,

kidneys and the pelvic organs seemed to be normal as far as could be ascertained. The blood vessels of the omentum were not enlarged. The morphologic and histologic characteristics of the cysts were strongly suggestive of their origin from dilation of preformed normal lymphatic vessels. Such processes are most likely caused by mechanical obstruction of the lymph vessels but what produces the occlusion remains a matter of conjecture. No secondary fibrosis resulting from mechanical pressure and causing stasis and varicose distention could be found. The presence of numerous anastomoses in the lymphatic system of the omentum was against the hypothesis of a mechanical obstruction. The character of the process responsible for the development of the cysts during the fetal life remains obscure. It appears that the condition remains silent and does not provoke any subjective symptoms unless

the cyst formations attain such a size that pressure symptoms or pain is provoked.

SUMMARY

A case of multiple cystic lymphangiomas of the omentum in a twenty-three year old woman is described. The condition was asymptomatic and was discovered in the course of a cesarean section. St. Elizabeth's Hospital 1433 N. Claremont Avenue.

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OBSTETRICAL AND GYNECOLOGICAL PROCEDURES PRESENTED BY TELEVISION

A televised close-up of obstetrical and gynecological procedures will be presented for the first time in a week-long graduate teaching program open to all members of the medical profession without charge. Facilities will be available to permit the attendance of 150 physicians.

This new method of instruction will be used at the Lewis Memorial Maternity Hospital in Chicago each day from 9 A.M. to 4:30 P.M. during the week of October 24th to 29th, inclusive. The program will be directed by Dr. Herbert E. Schmitz, Professor and Chairman of the Department of Obstetrics and Gynecology of the Stritch School of Medicine of Loyola University.

With a number of large screens in the hospital, each attending physician will be able to observe clearly on the television screen every detail of the procedures and hear the discussions carried on between operating surgeons. The operations will

be interrupted to show statistical data and material pertinent to the procedures.

This Television presentation of a teaching program is made possible through the cooperation of Ciba Pharmaceutical Products, Inc., and the Radio Corporation of America.

The nurse plays a particularly vital role in helping the patient to gain psychological acceptance of the diagnosis and in his psychological and emotional preparation for hospitalization. Both in what she tells the patient and in her attitude toward the patient as a person, the nurse can be highly instrumental in laying the foundation for a successful hospitalization experience for the tuberculosis patient. Especially during the course of teaching the patient protective measures for himself and his family, the nurse has the opportunity of strengthening the patient's attitude toward hospitalization. William B. Tollen, Ph.D., VA Pamphlet 10-27, Oct., 1948.

COUNCIL MEETING MINUTES

The August meeting of the Council was held at the Palmer House, Chicago, on Sunday, August 21, with the following present; Stevenson, Hedge, Camp, O'Neill, Stone, Harker, Hawkinson, Vaughn, Blair, Bornemeier, Peairs, Norbury, English, Otrich, Neece, Hopkins, Coleman, Hutton, Cross, W. O. Thompson, Neal, Leary and Frances Zimmer. Minutes of last meeting were approved. Secretary, in his regular report, outlined recent trip to Springfield as authorized by the Council, for Coye C. Mason, Camp and Frances Zimmer to make critical investigation as to the facilities available for the 1950 annual meeting. They found adequate facilities and a desire to cooperate on the part of the Association of Commerce, Sangamon County Medical Society, the hotels, and other groups. All exhibits, scientific and technical, and all general assembly programs can be scheduled for the large State Armory, now available for meetings. Council approved Springfield as meeting place, and appointed Jacob Reisch as General Chairman, Committee on Arrangements. Headquarters hotel will be the Abraham Lincoln, while the Woman's Auxiliary will hold their meetings at the nearby Leland Hotel.

Secretary told of recent re-arrangements in headquarters office in Monmouth, to provide more adequate space for the Society work. Stated that this Society has paid approximately 65% of the A.M.A. assessment and more money has not as yet been sent to the A.M.A. Efforts are being made to increase this percentage, and it is believed that a better report will be forthcoming for the next Council meeting in October. Second Speakers Conference scheduled for the LaSalle Hotel, Chicago, Sunday, September 11, and the Committee on Medical Service and Public Relations has scheduled a fine program, and every indication for a large attendance. It was requested that the Secretary's report be

sent to members one week prior to each meeting of the Council, and Chairman Hawkinson stated that this would be authorized and carried out. Report accepted and placed on file by proper action.

Stevenson reported as President, telling of the numerous speaking engagements he has filled during the summer months. Referred to proposed meetings throughout the state under the auspices of the Illinois State-wide Public Health Committee, which organization has asked for an official representative of the Society at each of these conferences. Told of the reactions on the part of many lay friends to the proposed Reorganization Plan No. 1, in his community, and elsewhere in the state, and many protests were sent to Senators: later the plan was not approved by the Senate.

Hedge reported as President-Elect, stating that he is always ready and anxious to help the President, and he too has accepted a number of speaking assignments during the summer.

Chairman Hawkinson, reported new appointments to committees; R. C. Oldfield, as a member of the Post Graduate Education Committee, and H. E. Davis, as a member of the Subcommittee on Radiology, of the Medical Advisory Committee to the I.P.A.C. By proper action (Hedge-Neece) appointments were approved.

Reference was made to recent editorial on report of Charles J. Whalen to the House of Delegates of this Society in 1919, as chairman of the committee on compulsory health insurance. Reprints were procured of this interesting report. Motion, Harker-O'Neill, that Secretary send copy to secretaries and editors of all state and territorial societies. Motion approved.

Otrich stated that the Committee on Nutrition met the previous evening, and they want to request that a speaker on nutrition be scheduled on the program for the 1950 annual meeting. They suggested that the in-

vation be extended to Dr. Jonathan Forman, Editor of the Ohio State Medical Society Journal.

Hopkins reported as chairman of the Medical Advisory Committee to the Veterans Administration, telling of renewal of contract for another year to give medical care to veterans under the home town medical care program. Hopkins also reported recent activities of the Committee in Voluntary prepayment Medical Care Plans, and especially relative to their meeting the previous evening. Serious consideration was given to the various types of plans now in operation in Illinois and elsewhere. Since last annual meeting additional responsibility has been given to the committee relative to the organization of individual county society service plans.

Reports from states having both service and indemnity plans gave the impression to the committee, that county plans apparently work to a better advantage than a single state wide service plan. Chicago Medical Society plan is expanding, and the county society approved plans in Winnebago and Rock Island Counties likewise are progressing satisfactorily. It has been reported that under the indemnity and the service plans now operating in Rhode Island, 56% of the people of that state are now protected under the two plans. During the fall, a meeting is to be held at which time reports from a number of states where indemnity, and/or/service plans are operating will give detailed reports. Hopkins told of the plans for the Second Speakers Conference scheduled for Sunday, September 11. Likewise reported on the ever growing responsibilities of his committee on Medical Service and Public Relations Referred to the recent articles in Chicago Tribune by Norma Lee Browning dealing with the activities in the Chicago area of "quacks", charlatans, etc., in the field on medicine. Moved, seconded Neece, that Council submit a resolution to be sent to Miss Browning, The Tribune and the Director, State Department of Registration and Education commending these articles and urging that the proper state authorities endeavor to eliminate the illegal practitioners in Illinois. Motion carried. Leary as Public Relations Counsel and Neal as executive Secretary for the committee added to the report of the chairman, telling of recent work in their respective fields. Neal will send a report of the legislative enactments of interest to the medical profession within a short time.

Coleman reported as chairman of the Medical Advisory Committee to the Illinois Public Aid Commission, which met with officials of the I.P.A.C. the previous evening. Commented on the present financial status of the I.P.A.C. and the legislative action cutting their appropriation for the coming biennium. Likewise Coleman reported on the United Mine Workers medical care program and some problems which have arisen. Believes these will all be ironed out and the program should go along satisfactorily, so far as medical care by Illinois physicians is concerned.

Blair reported as chairman, on recent activities of the Educational Committee, and discussed in much detail, the present weekly telecasts presented over the "WGN-TV" station. Some interesting press releases have ap-

peared recently telling of the increasing interest in these broadcasts. Told of the increase in the release of the regular "Health Talk" going to many on the mailing list, and is being used by 285 newspapers in the state. Above reports all accepted by proper action.

Hutton told of continued progress in compiling historical data, which has been under the supervision of Miss Salmonsens who is responsible for giving orders to her assistants, and is rapidly compiling the material. Believes this work will be completed within a relatively short time. Told of the activities of the C.M.S. Committee on Medical History which hopes to publish a book commemorating their 100 years of activity next year. Report accepted.

W. O. Thompson as Chairman of the Committee on Medical Education and Hospitals gave a report of progress following a meeting of the committee the previous evening. The committee composed of himself as chairman, Andrew C. Ivy and Harlan English have several important matters now under investigation and hope to have regular reports of their activities at subsequent meetings.

Cross reported as Director, State Department of Public Health, telling of legislative enactments, and commenting on some of the laws which were passed pertaining to the work of his department. These will be given to Neal to check with the material for his proposed report on legislative enactments, and will be sent to members in a short time. Discussed in much detail the present polio epidemic, telling of the established polio centers for the emergency. By proper action, report accepted and editors instructed to publish same in the Journal.

Secretary reported on several matters which had been listed on the agenda as correspondence. Each letter was acted upon, several being turned over to individual committees and will be reported upon at the next meeting.

The Physicians Association, Department of Public Welfare had requested that their annual meeting be scheduled for Wednesday, during the 1950 annual meeting. Permission was granted, by proper action.

The following members were elected to Emeritus Membership; Oliver J. Flint, Princeton; Herman C. Newton, Chicago, and William H. Garrison, White Hall. The following were elected to Past Service Membership; Charles H. Steubenrauch, Havana; S. W. McArthur, Elkhart; Sydney Walker, Beverly Hills, Calif. (C.M.S.) and John C. Hill, Chicago.

It was reported by the Secretary that the U. S. Pharmacopoeal Convention will be held next year for the regular revision of the Pharmacopoeal, and this Society is urged to submit the names of three candidates from which they may select the member. The matter should have some thought, and the representative should act intelligently as our official representative. It was moved, duly seconded, that the officers of the Society canvas the field and also write the medical schools for suggestions relative to our candidates. Officers given the power to act. Motion approved.

Bills as audited by Finance Committee were approved. Council adjourned at 2:15 P.M.

Harold M. Camp, M.D. Secretary.

PATHOLOGY CONFERENCES

EDWIN F. HIRSCH, DEPARTMENT EDITOR



Mixed Mesodermal Tumors of the Female Genital Tract

Keith G. Wurtz, M.D.

Mixed mesodermal tumors of the female genital tracts are rare. Because of variations in histologic structure, some confusion exists concerning which tumors should be included. Theoretically, any tumor containing at least one mesoblastic tissue foreign to the uterus or vagina is of this kind. On this premise, 19 mixed mesodermal tumors of the uterus or adnexae with a brief discussion of histogenesis, terminology, and etiology are analyzed.* No record except the diagnosis was available for one. Of the others, complete records were obtained for eleven, and partial records for seven. Of the 19 tumors, 17

were considered cancerous and 2 were benign.

In considerations of the age incidence, the site of growth of mesodermal mixed tumors is significant. Nearly all vaginal tumors occur in infants or children. Those arising from the cervix are most frequent in women in active menstrual life, and those of the body of the uterus are usually in women after the menopause. Among the 18 patients with records of this report, 1 child aged 15 months had a tumor of the vagina; 2 patients aged 56 years and 73 years had growths of the cervix; 14 women from 39 to 67 years of age (averaging 57.7 years) had growths originating in the corpus uteri; and 1 aged 65 years had a mixed mesodermal tumor arising in the broad ligament near the left ovary, possibly in the relation to Gaertner's duct, the rete ovary or the fallopian tube.

The age of incidence of carcinoma of the cervix and uterine body is approximately the same as that of similarly located mesodermal tumors. The 2 mixed tumors of the cervix in my report

From the Henry Baird Favill Laboratory, St. Luke's Hospital, Chicago.

*With the exception of one from Passavant Memorial Hospital** the tumors were in surgical tissues examined at St. Luke's Hospital from 1920 through 1947. Descriptions of three*** of the tumors have been published.

**Permission to include this tumor was given by Dr. Augusta Webster.

***One was recorded by Kissler, G. H. "A Papillary Mixed Tumor of the Body of the Uterus". *Am. Cancer*, 16: 399, 1932., and two others were described by Peterson, A. J. "Mixed Tumors of the Uterus". *J. Lab. and Clin. Med.* 8: 369, 1923.

occurred at an average age of 59 years which is somewhat later in life than is usual¹ but the average age of patients with corpus tumors was 57.7 years, approximately the same as other authors have observed.² However, the ratio of incidence of corpus and cervical mesodermal tumors in the St. Luke's Hospital material is 7 to 1 and differs from the observations of most authors who have stated that the cervical are more common.³ In an analysis of 94 tumors reported in the literature, Glass and Goldsmith in 1941² found 58 of the body and 36 of the cervix, a ratio of 1.6 to 1. Three of the 18 tumors of my report were in Negroes and 15 were in Caucasians which is roughly the proportion of hospital admissions of the two races. Of the 14 patients in the childbearing age or older with records, 7 were nulliparous, 5 were primiparous, and 2 were multiparous.

The most common symptom of mixed mesodermal tumors of the uterus is metrorrhagia. Fourteen of the 15 patients with uterine or vaginal tumors had metrorrhagia. Other complaints of less frequency were leukorrhea, suprapubic discomfort, urinary bladder distress, pruritis, anorexia, loss of weight and lower abdominal tenderness. The only physical finding of diagnostic aid was a palpable mass in the lower abdomen in 6 women, a polypoid mass protruding from the cervix or introitus in 2 patients with corpus lesions and in the 3 patients with cervical and vaginal lesions. Because of its hidden location, the adnexal tumor in the group caused no symptoms until well advanced and then only an indefinite lower abdominal pressure and discomfort. Among 11 patients with available menstrual records, 1 complained of irregularity of menses, and 2 had menorrhagia and metrorrhagia. Apparently menstrual difficulties are not significant with these tumors, but menopausal abnormalities are. Of 12 patients with fairly complete menopausal records, 6 had climacteric menorrhagia or metrorrhagia. At best, the diagnosis of these tumors can only be suspected clinically on the basis of a rapidly growing, freely bleeding neoplasm. Any polypoid vaginal growth in childhood is almost pathognomonic. The diagnosis of mesodermal mixed tumors, of course, rests on the histological examination.

Because of the cancerous nature of most of these tumors, radical treatment is indicated. A gradual trend in recent years is toward complete



Figure 1. Photograph of a vaginal mixed mesoblastic tumor (sarcoma botryoides) in a Negress aged 21 months. Death occurred at the age of 26 months from extensive metastases.

hysterectomy and salpingo-oophorectomy followed by extensive radiation over the pelvic regions.

The survival rate for patients with cancerous mixed mesodermal tumors is small. Only 2 patients living five or more years without metastasis or recurrence have been reported in the literature; von Franke² recorded 1 surviving ten years, and Hartfall⁴ cited 1 surviving five years. Of 16 patients with cancerous mixed tumors, 6 were alive and well either at the time this record was written or at the last examination, an average survival for these patients of 38.3 months after the onset of symptoms and 35.5 months after the initiation of treatment. Two had local recurrences, and 8 were dead. Of the latter, 6 died of recurrent cancer, 1 of surgical complications and 1 of heart disease.

Pathology.—The site of origin of mixed mesodermal tumors has some importance in histogenesis, that is, whether they arise from the wall of the uterus or vagina. Of the 4 tumors of

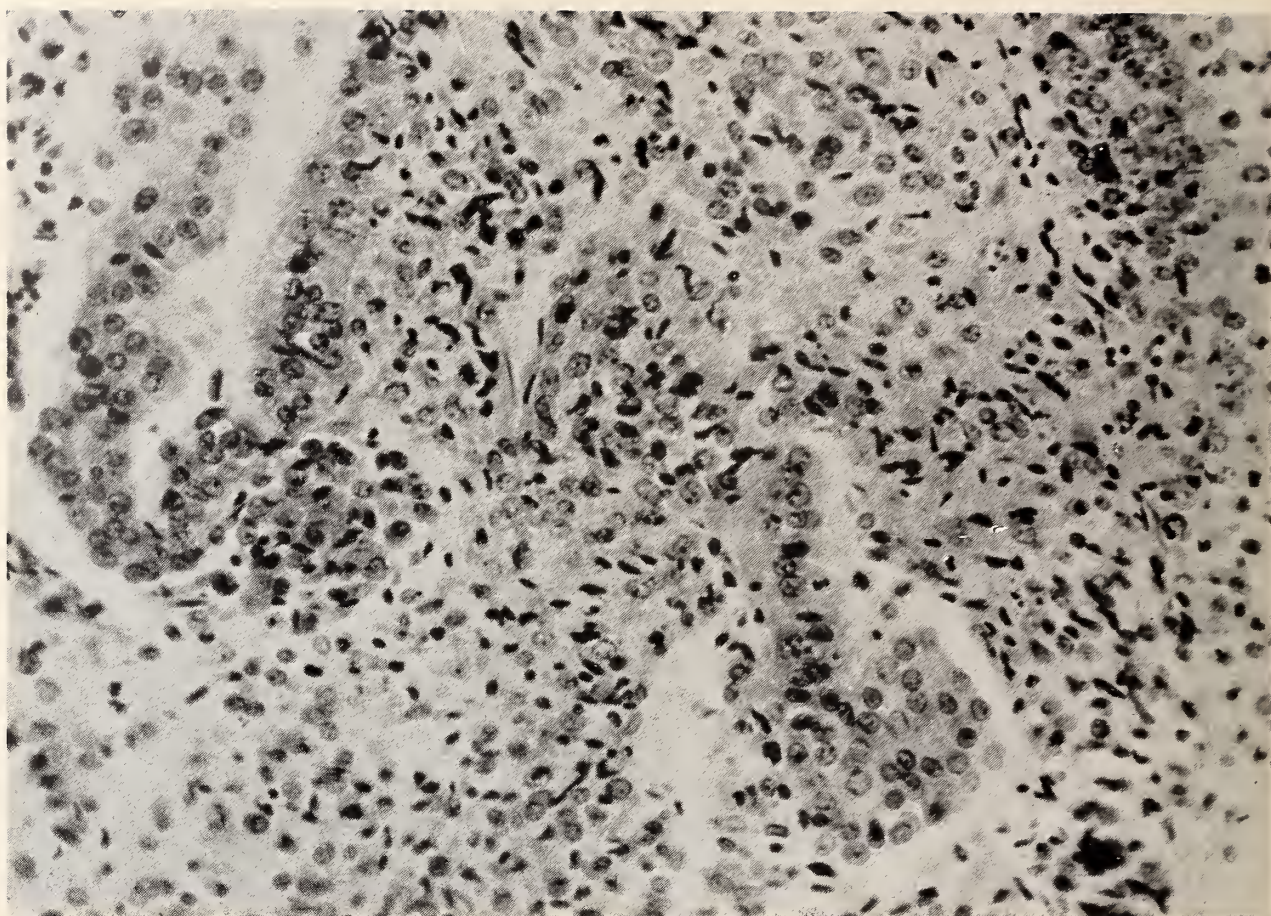


Figure 2. Photomicrograph illustrating a mixture of carcinoma and sarcoma tissues in one of the mixed tumors.

the uterine corpus whose origin could be determined, 1 was from the right lateral wall, another was from one cornu and 2 were in the midline. Both cervix tumors started on the posterior lip, and the vaginal tumor on the posterior vaginal wall.

Mixed tumors of the uterine body have a few characteristics which distinguish them grossly from other growths. The peritoneal surface of the uterus was smooth but nodular even in the large tumors. Extension into surrounding tissues or adherent abdominal viscera was frequent. Four of this series had polypoid growths, although several were too advanced to determine these characteristics. Some had large masses of fat. Frequently they had a grey fleshy appearance like sarcoma, and when of large size had yellow, red or brown soft necrotic regions. One tumor had cartilage grossly. In contrast, grape-like tissue structures are characteristic of many cervical and vaginal tumors and has resulted in the designation sarcoma botryoids.

Histology.—Mixed mesodermal tumors of the uterus contain several heterologous tissues. Although not a heterogenic genital tract tissue, carcinoma was the most frequent tissue. It consists of the usual masses of atypical gland-like or papillary structures with columnar epithelium or solid aggregates of cells without differentiation. The individual cells vary in size and contour and have large vesicular nuclei. Cells in mitosis were common. Because metastasis occurred with several, no doubt exists concerning the cancerous nature of the epithelial elements. The adnexal tumor had a papillary structure and this metastasized to several tissues, along with the cartilage.

Cartilage is the commonest heterotopic tissue reported in the literature, and the most frequent in this study (12 of 19 tumors). Most often distributed in small islands surrounded by spindle cells, the cartilage is immature and like that seen in newborn infants. Perstein⁵ stated that he has seen a transition from spindle cells to cartilage. Kisler⁶ placed considerable emphasis

on the multiple discrete foci of cartilage in his mixed tumor. This suggested a pluricentric origin of cartilage tissues either because of multiple foci of cartilage cells from which these foci developed or because growth stimuli acted on the connective tissues so that they differentiated into cartilage.

Fat tissues have been described in a number of tumors and occurred in 5 of this report, 3 cancerous and 2 benign. Microscopically they had the usual fat cells with fibrous stroma. Its presence in large amounts according to Petersen⁷ favors the conclusion that the tumor is benign. Large or small spindle cell sarcoma tissues, embryonal or mesoblastic tissues, are present in many of the tumors and much discussion concerns whether they are myxomatous, edematous, or mesenchyma elements. Two corpus tumors and 1 cervical tumor in this series had these structures. An uncommon heterogenic tissue is bone.⁷ Only two uterine body tumors had osteoid tissues.

An interesting heterologous tissue is the striated muscle which rarely is present in the uterus, and only in mixed tumors. Lebowich and Ehrlich⁸ in a comprehensive survey of the mixed tumors found only 12 corpus tumors with striated muscle fibers. One tumor in my series had an occasional striated muscle cell found by careful search in sections stained with phosphotungstic acid and hemotoxylin. These cells had oval or round vesiculated nuclei, and the cytoplasm tapered into a long protoplasmic tail with cross striations and longitudinal fibrils. Similar cells were found at another hospital in the vaginal tumor and also in the metastasis. No patient with a mixed mesodermal tumor of the female genital tract containing striated muscle cells has survived for long. One in this group died 18 months after the onset of her symptoms, and the other had an extensive local recurrence.

Glass and Goldsmith² found only 9 mixed mesodermal tumors associated with fibromyomas. Four of the corpus neoplasms among the 19

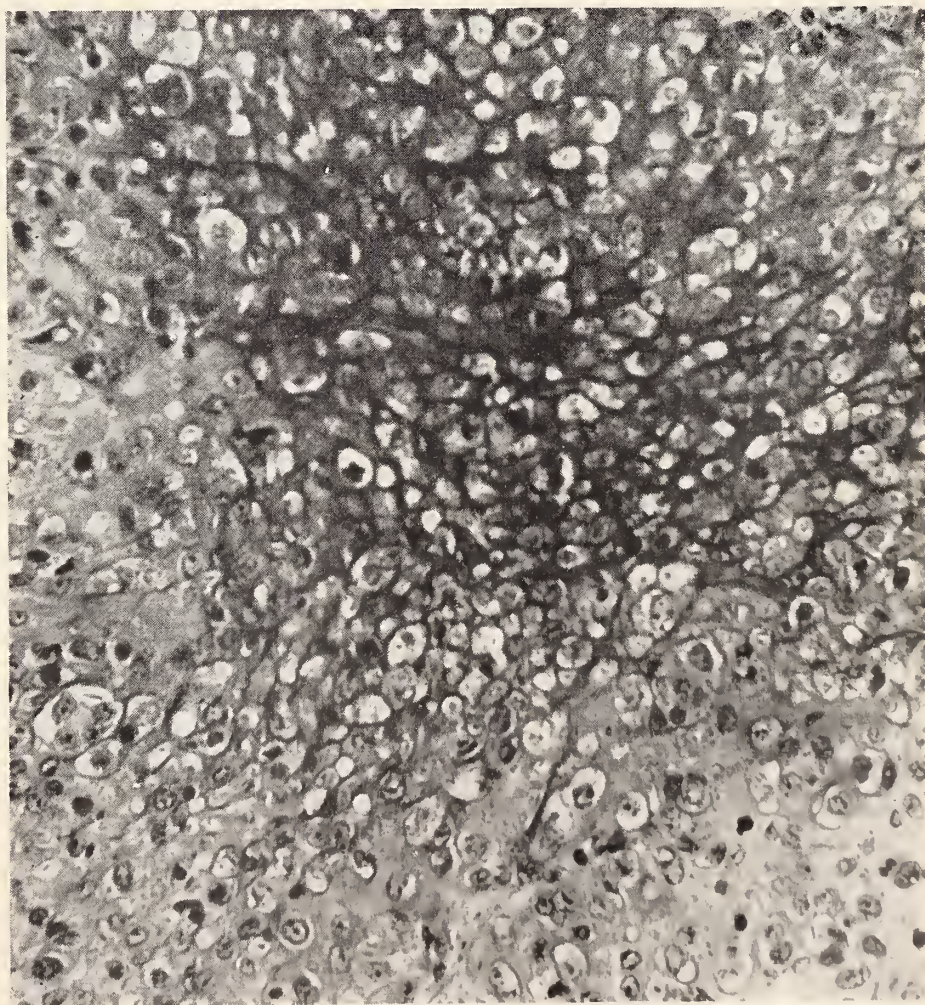


Figure 3. Photomicrograph illustrating the structure of the cartilage tissues observed in mixed tumors of the uterus.

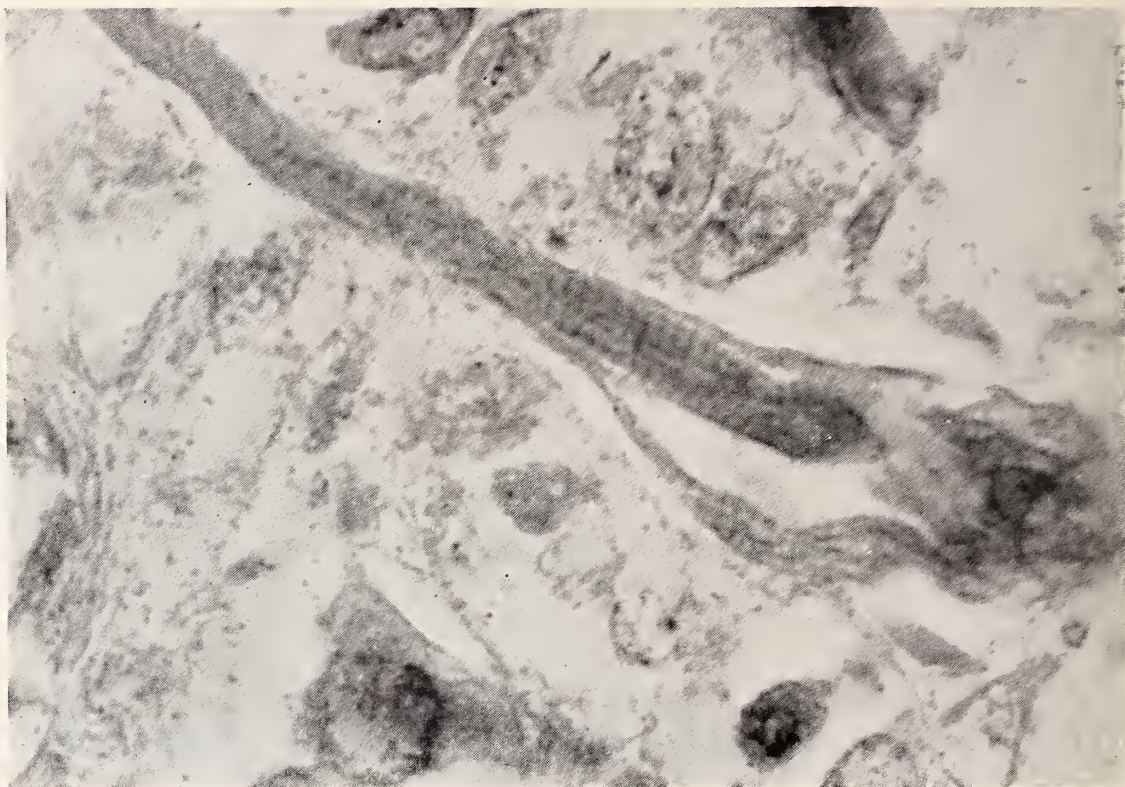


Figure 4. Photomicrograph illustrating a rhabdomyosarcoma fiber.

patients in my group were associated with fibromyomas of the body. One cervical tumor was associated with fibromyomas and the other tumor was in a cervical stump which remained after the corpus containing fibromyomas had been removed eleven years before.

A thorough search of the medical literature reveals only 1 ovarian metastasis⁹ reported as such and probably another¹⁰ although not specifically reported. Among the tumors included in this paper are 2 with ovarian metastasis, 1 with metastasis of the carcinoma elements, and the other with both cartilage and carcinoma elements. Of the 18 metastatic lesions which occurred with 10 of the tumors, 12 were carcinoma tissues and 1 also had cartilage. Mixed mesodermal tumors recur locally.

Terminology.—According to Perlstein⁵ the first mixed tumor of the uterus was reported in 1854 by Wagner as chondrosarcoma. Since then most tumors have been reported on the basis of their histological structure as carcino-chondromyxo-fibro-rhabdo-myo or leio-myo-sarcoma. This terminology is not satisfactory because every mixed tumor does not have all of these constituent tissues and most of them have undifferentiated cells not identified as of a particular tissue.

In 1892, Pfannenstiel published a report on mixed tumors entitled “Das traubige Sarcom der Cervix uteri”¹¹. Following this, English and American writers described these neoplasms as botryoid sarcoma from their grape-like appearance. Several reasons for the formation of these grape-like masses have been advanced such as edema or torsion of polyps and rapid growth in a preformed cavity like the vagina⁷. However, the fact that tumor tissues which have invaded adjacent regions and the metastases only rarely⁸ have the grape-like structure, indicates that this is no characteristic quality.

Wilms did much to clarify the confusion of names in his monograph “Mishgeschwülste” published in 1899¹² on urogenital tumors, and Kehr⁸ in 1906 advised the use of the term mesodermal tissue structure, and the relationship to the possible origin of these tumors from embryonal mesodermal residues. As Meikle¹³ stated, such a name would include also those tumors containing glandular and epithelial elements because the lining of the uterus is derived from mesoderm. Duggan¹⁴ disagreed with this opinion because he believed that the glandular epithelial elements are not necessarily mesodermal in origin. He considered the name “mixed

tumors" more accurate and sufficiently descriptive. Long usage of the term originated by Kehrer and the good reasons given for its use make the name mixed mesodermal tumor preferable when applied to neoplasms containing tissues heterologous to the female genital tract.

Histogenesis and Etiology.—No accepted hypothesis has been advanced to explain the occurrence of tumors having such a wide variety of heterologous tissue constituents in the uterus. Pfannenstiel¹¹ proposed that the connective tissue of the uterus by a process of metaplasia and growth instituted by an undetermined cause, resulted in the various heterologous components of these neoplasms. This idea has few adherents.

Wilms¹³ advanced a theory based essentially upon Cohnheims' hypothesis of cell rests. He maintained that the tumors spring from rudiments of primitive mesodermal tissue displaced by the downward movement of the Wolffian body early in embryonal development. The complex histological structure of the tumors and the complicated embryological formation of the urogenital system favor such an interpretation. However, this view is somewhat clouded by the absence of skeletal muscle along the Wolffian system, and the failure of these mesodermal tumors to occur along the course of the Wolffian duct outside of the uterus.

When the site of origin of a mixed tumor has been possible to determine, this has been most often in the posterior midsagittal plane, occasionally in the anterior midsagittal plane, and infrequently in the lateral wall of the uterus or vagina¹³, a location somewhat removed from the course of Gaertner's duct. Of the 7 tumors in which the origin could be determined in my series 2 arose from the lateral wall and 5 from the midsagittal plane of the uterus and vagina, 1 anteriorly, 1 in the fundus, and 3 posteriorly.

A plausible variation of Wilms theory advanced by Möncheberg, Kehrer, and Lahn, and quoted by Lebowich and Ehrlich⁸ is that the cell rests occur as a result of the fusion of the Mullerian ducts in which the fusion line is the ultimate anterior and posterior midsagittal planes of the uterus and vagina. This variation would explain more satisfactorily the origin of most mixed tumors in the anterior or posterior portions of the uterus, cervical lip, or vagina. A combination of these variations of Wilms' theory is the most likely explanation, i. e. an origin

from embryonal cell rests, both along Gaertner's duct and along the fusion line of the Mullerian duct. At present it is impossible to explain why these cell rests are dormant in the uterus for several decades and then become cancerous.

SUMMARY

Of 19 mixed mesodermal tumors of the female genital tract presented, 15 were of the corpus uteri, 2 were of the cervix, 1 was of the vagina, and 1 was of the adnexa.

Generally the vaginal tumors occur in infants or children, the cervical in women in active menstrual life, and the corpus tumors in women after the menopause. Race and menstrual irregularity had no significance in diagnosis. Most patients were nulliparous or primiparous. Most of the patients had excessive or abnormal menopausal or postmenopausal vaginal bleeding. Treatment has gradually evolved to radical surgery followed by x-ray therapy, but the prognosis is grave.

The final diagnosis is made on the presence of tissues heterologous to the female genital tract, such as cartilage, striated muscle, bone, fat, or other characteristic mesoblastic tissues. Most patients had local recurrence or metastasis. The best term for these neoplasms seems to be mixed mesodermal tumor. A combination of the theories of origin from cell rests along the fusion line of the Mullerian and Gaertner's ducts best explains the histogenesis.

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NEWS OF THE STATE



COOK

Dr. Ratner of Loyola Named to Oak Park Health Post.—Dr. Herbert Ratner, Oak Park, associate in public health and bacteriology and director of student health, Stritch school of Medicine of Loyola University, was recently appointed temporary full-time health commissioner of Oak Park. Dr. Ratner will serve until November 15.

Branch Meeting.—At a meeting of the North Side Branch of the Chicago Medical Society, October 27, the speakers were Dr. Charles Lee Buxton, associate professor of obstetrics and gynecology, Columbia University College of Physicians and Surgeons, New York City, on "Etiology and Therapy of Abnormal Uterine Bleeding" and Dr. Robert S. Hotchkiss, professor of urology, New York University College of Medicine, on "Types of Hypogonadism in the Male and Their Treatment."

Mercy Hospital Meeting.—The Mercy Hospital Internes and Residents Alumni Association will hold their annual meeting, Saturday, October 22, following the American College of Surgeons convention. Wet and Dry Clinics will be held Saturday morning at Mercy Hospital followed by a business meeting and luncheon at the hospital. There will be an informal dinner dance in the Grand Ballroom of the Blackstone Hotel. Cocktails will be at 6 p.m.

Gift to Support Epilepsy Clinic.—The Junior League of Chicago has awarded a gift in the amount of \$13,000 to the University of Illinois Research and Educational Hospitals for the purpose of maintaining and operating the Consultation Clinic for Epilepsy.

The gift covers a period of one year. It represents the continuation of support of the clinic by the Junior League.

More than 1,000 patients have been seen in the clinic since it was established in 1946. Support for the clinic also has been provided by the Division of Rehabilitation of the State Department of Public Welfare, and the Division of Special Services for Crippled Children.

The clinic represents a pioneer project which is designed to provide better care for epileptics throughout the state. Dr. Frederic A. Gibbs is director of the clinic.

Dr. Wright Adams Given New Post.—Dr. Wright Adams, professor of medicine and associate dean of the division of biological science at the University of Chicago, has been appointed chairman of the department of medicine at the Midway university.

He will succeed Dr. Lowell T. Coggeshall, who resigned as chairman of the department of medicine July 1 to devote full time to his post as dean of the division of biological sciences and to his research work in internal medicine and tropical diseases.

Dr. Adams, a member of the cardiac department of the University of Chicago Clinics since his appointment to the university in 1930, will resign as associate dean of the division.

Federal Grant for Heart Research.—The \$485,000 grant from the Federal Security Agency, through the National Heart Institute of the Public Health Service, will enable the University of Chicago to

start on its planned project for extensive expansion of facilities for research on heart disease, Dr. Lowell T. Coggeshall, dean of the division of the biological sciences, said recently. With the government grant it will be possible to add two floors for patients' beds and laboratories for study of heart disease to one of the three new general research hospitals which the University has in the blueprint stage for its medical center. These buildings are in addition to the \$2,250,000 Nathan Goldblatt Memorial for study of cancer, now under construction and the \$3,500,000 Argonne Cancer Research Hospital of the Atomic Energy Commission, to be started shortly. The two floors will provide 24 patient beds for teaching and research, and 12 beds under conditions which will permit control of such factors as oxygen content, temperature, and humidity for special types of investigation. In addition, some urgently needed laboratory space will be provided.

Private Funds for Steam Plant.—Gov. Adlai Stevenson recently announced that private capital has been enlisted to provide steam service to institutions in the Chicago Medical Center District, thereby saving tax funds which had been sought for that purpose.

A new corporation, the Medical Center Steam Company, has been organized to provide the service to the University of Illinois and other institutions in the 300-acre district which desire such service.

The State Department of Public Health and Loyola University already have expressed a desire for this service. The Veterans Administration also has indicated that it plans to use the service for its new 500-bed general hospital which will be erected on Polk and Taylor streets, south of Damen avenue. The operations of the Medical Center Steam Company will be conducted by the Commonwealth Edison Company on a non-profit, service-at-cost basis.

New Hospital Affiliations for Illinois.—The Baptist Home and Hospital of Maywood has been granted an association with the University of Illinois College of Medicine, Dean John B. Youmans has announced.

The association has been formed for the purpose of strengthening the medical services of the Home, and for developing a program of study into the nature of the aging process and measures designed to delay and alleviate it. The service will be available for resident training.

Dr. Sanford A. Franzblau, an instructor in internal medicine at the University, has been appointed medical director for the Baptist Home and Hospital.

Dr. Franzblau said that a five-point development program would be undertaken. Objectives include the installation of the latest facilities for patient care including diagnostic laboratory facilities and the establishment of a complete system of medical records.

Other objectives are the development of an up-to-date geriatrics nursing service under the supervision

of registered nurses, the institution of special therapeutic diets suited to the needs of individual patients, and the establishment of carefully-controlled investigations into special problems of medical care in older people.

Research on Betatron.—The U. S. Public Health Service has awarded a grant in the amount of \$15,000 to the University of Illinois College of Medicine in support of research studies involving the 22-million volt betatron. The grant will be used specifically for the study of the effects of the betatron x-ray beam on bone and cartilage. The study is under the supervision of Dr. Roger A. Harvey of the department of radiology and Dr. G. A. Bennett of the department of pathology. The betatron is an instrument of high energy x-rays and electrons invented by Prof. Donald W. Kerst of the University of Illinois. Use of the betatron was focused on industrial x-ray work during the war. The University's College of Medicine was the first to receive the instrument for use in cancer treatment and research. Research studies have been conducted since its installation six months ago, and preparations now are being made for the treatment of patients late this month.

Faculty Changes at Illinois.—Dr. Theodore Cornbleet and Dr. Theodore J. Wachowski have been promoted to the rank of professor at the University of Illinois College of Medicine, it has been announced by Dean John B. Youmans.

Dr. Cornbleet, who formerly held the position of associate professor in dermatology, received the degrees of bachelor of science and doctor of medicine at the St. Louis University School of Medicine. Prior to coming to the University of Illinois in 1926, Dr. Cornbleet was on the staff of Washington University.

Dr. Wachowski, who formerly held the position of associate professor in radiology, received the degrees of bachelor of science and doctor of medicine at the University of Illinois College of Medicine. He has been on the staff of the University since 1932.

Dr. Youmans also announced the promotion of eleven assistant professors to the rank of associate professors.

Faculty members who have been promoted to the rank of associate professors are Dr. Gustav L. Zechel and Dr. James C. Plagge, department of anatomy; Dr. Anron B. Kendrick, Dr. Louis R. Limarsi, and Dr. Fredrick C. Lendrum, department of medicine; Dr. Paul H. Holinger, Dr. Maurice F. Snitman, and Dr. Marvin J. Tamari, department of otolaryngology; Dr. Maurice Lev and Dr. Lester S. King, department of pathology; and Dr. John J. Fahey, department of orthopaedic surgery.

New Enrolees High in Scholastic Average.—Scholastic averages of 166 students who were selected for enrollment in September in the University of Illinois College of Medicine are the highest of any class in the school's sixty-two-year history.

Examiner and Recorder George R. Moon said that almost all of the first-year students have scholastic records of 88 percent or above for the three years of pre-medical studies.

Three students who did not have averages of 88 percent were admitted under the provisions of a recent agreement between the University and the Illinois Agricultural Association and the Illinois State Medical Society. The program is designed to train students who have agreed to practice in areas of the state which have been critically short of physicians.

Moon said that the University would be able to accommodate only one out of every four qualified applicants who sought admission to the first-year class in medicine.

Applications were received from 596 students whose scholastic records placed them above the minimum qualifications set by the University of Illinois Board of Trustees. Many other applications also were received.

Despite the great demand for admission, the University will be unable to increase its enrollment in medicine until additional hospital, laboratory, and classroom facilities are available.

Moon pointed out that the individual classes in medicine at the University of Illinois already are the largest of any school in the country.,

All applicants who have been accepted for admission are residents of Illinois. Exactly half of those selected live in Cook County, while the remaining half are from downstate areas—in ratio with the population of the state.

Ninety-seven of the 166 students accepted are veterans. Ten women also are included in the class

Factors in the selection of students, in addition to scholarship, were the results of a professional aptitude test supervised by the Association of American Medical Colleges, recommendations from science teachers and pre-medical counselors, ratings on interviews with at least two members of the faculty of the College of Medicine, and a physical examination.

University News.—Dr. Aldo A. Luisada, Tufts College Medical School, has been appointed to the staff of The Chicago Medical School as assistant professor of medicine and program director of cardiology. Dr. Luisada is a graduate summa cum laude of the Royal University of Florence Medical School. He has held a number of professorial posts in Italian universities and in this country. Dr. Luisada has written 129 scientific publications, several monographs and two books on heart disease in general. These have been translated into Spanish and Italian.

University News.—Dr. Nicholas Stefan Halmi, Hungarian scientist who escaped the Iron Curtain to accept an appointment to the University of Chicago anatomy department last year, arrived in Chicago recently for the autumn quarter of the Midway university. Dr. Halmi, one of 25 Hungarians

who fled from their Soviet-dominated nativeland by plane from Pecs, Hungary, to the American zone of Germany last January 4, arrived in New York City this week aboard the Sobieski. Dr. Halmi, 27, left Cannes, France, August 4, to assume the teaching post the Midway university offered in 1948 when Dr. Halmi was still in Budapest. At the University of Chicago, Dr. Halmi will serve as an instructor in anatomy. Dr. Halmi, who has specialized in research in the anatomy of the nervous system and the endocrine glands, was on the faculty of the Anatomical Institute of the University of Sciences at Pecs, Hungary, from September, 1947 to January, 1949. From 1945 to 1947, Dr. Halmi was associated with the department of anatomy at the Metropolitan New St. John's hospital. Dr. Halmi received a doctor of medicine degree with highest honors from the Peter Pazmany University at Budapest in July, 1947, and interned and taught at St. John's Hospital. A native of Budapest, Dr. Halmi entered the United States on a non-quota visa issued by the United States consulate general at Munich.

Community Health Class.—Current problems in community health from the city, state, national and international viewpoint will be discussed in an autumn quarter class at University College, 19 South La Salle street, downtown center of the University of Chicago.

Voluntary and compulsory insurance plans, the state industrial health and mental hygiene programs, and the world health organization will be outlined in the sessions which open October 4. The series includes seven Tuesday evening meetings at 7:30 p.m. in the Woodrow Wilson room of the Lakeview Building (116 South Michigan avenue).

Dr. Ernest Irons, president of the American Medical Association, will discuss "General Principles Underlying Welfare Efforts" on October 18.

Other speakers for the series include Robert E. Merriam, alderman from the fifth ward, Chicago; Fred Hoehler, director of the state department of public welfare; Alton A. Linford, associate professor of social service administration, University of Chicago; Dr. Frederick Slobe, chairman of the Chicago Medical Society committee on industrial health; and Louise Leonard Wright, director of the Chicago Council on Foreign Relations.

Lectures on Atomic Energy.—A series of lectures on the relation of atomic energy to biology and medicine will be held at The Chicago Medical School on Wednesdays beginning October 12 through November 30 at 1 p.m. The series is open to the public. The lectures will cover the physical principles of radiation, the effects and uses of radiation and protection against and cure of its effects. Included in the series will be two motion picture films on the Bikini atom bomb experiment. The series is as follows:

October 12. "Radioactive Isotopes: Applications to Medicine" Dr. W. F. Libby, professor of

chemistry, Institute of Nuclear Studies, University of Chicago.

October 19. "Radioactive Isotopes in Biological Research", Dr. A. R. Goldfarb, instructor in biochemistry, The Chicago Medical School.

November 2. "Operation Cross Roads" (Motion Pictures) Commander C. A. Erickson (SEC) U. S. Navy.

November 9. "Patho-Physiological Effects of Radiation", Dr. Elizabeth Painter, assistant professor of physiology University of Illinois College of Medicine.

November 16. "Medical Uses of Radioactive Isotopes" Dr. Leonida Marinelli, associate director, Health Physics Division, Argonne National Laboratory, Chicago.

November 30. "Nature and Therapy of Radiation Sickness" Dr. A. M. Brues, director, Biological Division Argonne National Laboratory, associate professor of medicine, University of Chicago School of Medicine.

The series has been arranged by Dr. Piero P. Foa, associate professor of physiology and pharmacology, The Chicago Medical School, and chairman of the Journal Club and Science Committee. The various lectures will be published for distribution at the conclusion of the series.

Personal.—Dr. Karl A. Meyer, professor of surgery, Northwestern University Medical School, participated in the Southwestern Surgical Congress in Houston, Texas, September 26-28.—Dr. Meyer Perlstein, Chicago discussed "Drug Therapy in Epilepsy" before the University of Utah School of Medicine in Salt Lake City, October 1. Dr. Perlstein will also hold a Cerebral Palsy Clinic in Battle Creek, Michigan, for the Michigan Society for Crippled Children, October 18-20.—Professor William H. Taliaferro, chairman of the department of bacteriology and parasitology, University of Chicago School of Medicine, was recently made honorary fellow of the Royal Society of Tropical Medicine and Hygiene of London.—Dr. Leon Unger, Chicago, has returned from a trip to Great Britain and Ireland. While there, he addressed the British Medical Association at Harrogate on "Nasal Allergy"; the British Association of Allergists at Cardiff, Wales, and the Institute of Microbiology, London, on "Bronchial Asthma"; and the Association of Hospitals in Oxford on "Migraine."

Climate Room.—A climate room, varying in temperature from the cool crisp 50's to the dripping heat of the tropics, has been built for eclampsia research at Chicago Lying-in Hospital and Dispensary of the University of Chicago.

A weatherman's "dream room," the climate room, with controlled temperature and humidity, was built to aid eclamptic patients whose convulsions and coma may result because of a change in the weather.

Chicago Lying-in hospital's eclampsia program, one of the most extensive studies ever undertaken of eclampsia and the symptoms foreshadowing it,

is being conducted by Dr. William J. Dieckmann, chief-of-staff and Mary Campau, professor of obstetrics and gynecology.

The study, accelerated by a \$381,000 fiftieth anniversary gift to Lying-in by Chicagoans in 1945, is leaving no facets unturned to determine the cause and treatment of the disease which exacts the life of 13 out of every 100 eclamptic pregnant women in the United States.

DU PAGE

Dr. Radner Named Medical Chief.—Dr. David B. Radner has been appointed medical director of Winfield Hospital, Du Page County, succeeding Dr. Edwin R. Levine, who resigned the position held for five years to return to private practice. Dr. Radner also will head the chest department of Michael Reese Hospital.

MORGAN

Society News.—The Morgan County Medical Society held a meeting September 8 at the Morgan County Tuberculosis Sanatorium. The speakers on the program were as follows: Dr. Henry A. Sweany, medical director of research, City of Chicago Municipal Tuberculosis Sanatorium, on "Pathology of Tuberculosis After Streptomycin Therapy" and Dr. Eugene T. McEnery, Chicago, clinical professor of pediatrics, Stritch School of Medicine of Loyola University, on "Treatment of Streptomycin in Children with Tuberculosis."

PEORIA

Society News.—Dr. John I. Brewer, Chicago, addressed the Peoria Medical Society, September 20, on "Pelvic Pain."

RANDOLPH

Society News.—Dr. W. W. Fullerton, Steeleville, was recently elected president of the Egyptian Regional Chapter of the Illinois State Chapter of the American Academy of General Practice. Other officers are Dr. John A. Legier, Carmi, vice president; Dr. Norman Albert, Johnson City, secretary-treasurer and Dr. B. E. Montgomery, Harrisburg, chairman of the board of directors.

ROCK ISLAND

Society News.—"Recent Advances in Vitamin Therapy" was the title of a discussion by Dr. William Bean, professor and head of the department of internal medicine, State University of Iowa College of Medicine, before the Rock Island County Medical Society, September 13 at the East Moline State Hospital.

SANGAMON

Fifty Year Members.—At the September 1 meeting of the Sangamon County Medical Society the Fifty Year Emblem and Certificate of the Illinois State Medical Society were presented to Drs. Fred O'Hara, Walter S. Taylor and Arthur L. Hagler, all of Springfield. The presentation was made by Dr. Ralph P. Peairs, Councilor of the Fifth District.

Personal.—Dr. Darrell H. Trumpe, medical director of St. John's Sanitarium, Springfield, was elected president of the Illinois Chapter of the American College of Chest Physicians at a recent meeting.

Society Election.—New officers of the Sangamon County Medical Society include the following: Dr. James Graham, president; Dr. Nathan Rosen, vice president; Dr. William DeHollander, secretary-treasurer; Dr. Darrell H. Trumpe, and Dr. Kenneth Schnepf, delegates to the Illinois State Medical Society; Dr. Jacob E. Reisch and Dr. Marvin J. Salzman, alternates; and Dr. P. V. Dilts and Dr. Nelson H. Chesnut, board of directors.

WARREN

Personal.—Dr. Harold M. Camp, Monmouth, Secretary of the Illinois State Medical Society, lectured at the McCormick Theological Seminary, Chicago, at a dinner meeting, August 24 on "Rural Medical Service."

WILL-GRUNDY

Physicians Honored.—Dr. Grant Houston and Dr. Earl Steen, both of Joliet, were recently awarded membership in the Fifty Year Club of the Illinois State Medical Society. The presentations of the Fifty Year emblems and certificates were made by Dr. Edwin S. Hamilton, Kankakee.

WILLIAMSON

Dr. Burkhart Day.—Dr. V. H. Burkhart, who has practiced in Hurst for thirty-seven years, was honored August 25 when "Dr. Burkhart Day" was observed. The public demonstration was sponsored by the local Lions Club and tags bearing the boastful declaration that "I am a Burkhart Baby" were worn for the occasion. Dr. Burkhart is a former mayor of the town of Hurst.

GENERAL

New Hospital Public Relations Group.—Formation of the Chicago Hospital Public Relations Association composed of public relations directors of Chicago hospitals was announced recently.

A semi-formal organization, the new group has three major objectives:

- 1) To promote a common ground on which hospital public relations people may discuss problems and exchange information on activities and policies;
- 2) To promote a closer working relationship with press, radio, and all other media of communication;
- 3) To promote better understanding of the problems and scope of hospital public relations by hospital administrative staffs and the medical and nursing profession.

Officers chosen to head the association are: Mrs. Germaine Febrow, St. Luke's Hospital, President; Scott Jones, Wesley Memorial Hospital, Vice-President; Neola Northam, Children's Memorial Hospital, Secretary-Treasurer; Mrs. Florence Hyde, Presbyterian Hospital, Membership Chairman; C. Lincoln Williston, University of Illinois Hospital, Program Chairman.

The association will meet every other month. Program plans call for panel discussions on such subjects as medical and hospital publicity ethics, press relations, and the press code. Representatives from the medical and hospital profession and the press will be invited to participate.

Representatives from the following Chicago hospitals were present at the organizational meetings: St. Luke's, Wesley Memorial, Passavant, Children's Memorial, Presbyterian, Billings, University of Illinois and Grant.

Dr. A. C. Ivy, Vice-President of the University of Illinois in charge of Chicago professional schools, will address the association and its guests September 7 at the Presbyterian Hospital. His subject will be "Medical Education of the Public".

DEATHS

DR. ANDREW HUGH BELTZ, Eldorado, who graduated at Bennett College of Eclectic Medicine and Surgery in 1914, died August 15, aged 75. He had practiced medicine in Eldorado since 1917.

GUSTAVUS M. BLECH, Chicago, who graduated at Barnes Medical College, St. Louis, Mo., in 1894, died August 9, aged 78. He was a retired colonel of the army medical corps.

HUGH F. BOWERS, Belleville, who graduated at St. Louis University School of Medicine in 1941, died August 18, aged 33, of a heart attack.

JOHN HOWARD BRYANT, Galesburg, who graduated at Northwestern University Medical School in 1903, died in North Hollywood, California, August 13, aged 72. He had practiced medicine in Galesburg about 42 years before moving to California 4 years ago.

ALGER ARTHUR CLARK, Des Plaines, who graduated at the University of Illinois College of Medicine in 1916, died August 1, aged 58.

HILDING WALFRED ERICKSON, Newark and Joliet, who graduated at Loyola University School of Medicine in 1927, died August 11, aged 53, following a brief illness.

ROBERT ELLIOTT GRAVES, Chicago, who graduated at the Hahnemann Medical College and Hospital, Chicago, in 1904, and Rush Medical College in 1907, died July 2, aged 72, of pulmonary tuberculosis and uremia.

JOHN CURTIS GRIFFITH, Bushnell, who graduated at Rush Medical College in 1896, died suddenly of a heart attack, August 10, aged 77.

WILLIAM BENJAMIN HANELIN, Chicago, who graduated at the College of Physicians and Surgeons of Chicago, School of Medicine of the University of Illinois, 1906, died July 23, aged 70, of coronary thrombosis.

JOHN FRANKLIN HENDERSON, Oakland, who graduated at the University of Illinois College of Medicine in 1911, died August 25, aged 68.

MORRIS L. HERSHMAN, Chicago, who graduated at Chicago College of Medicine and Surgery in 1917, died September 8, aged 60. He was a member of the staff of Garfield Park Community Hospital.

EDMOND ARTHUR HOLBERG, Chicago, who graduated at Northwestern University Medical School in 1907, died August 4, aged 66.

THOMAS ARTHUR JOHNSON, Rockford, who graduated at Rush Medical College in 1911, died August 7, aged 63, following a heart attack.

ANNA M. HENNESSY KINDER, LaSalle, who graduated at The Hahnemann Medical College and Hospital, Chicago, in 1904, died August 2, aged 67. She had practiced medicine in LaSalle for 43 years.

NATHANIEL BENJAMIN LANS, Chicago, who graduated at the University of Illinois College of Medicine in 1924, died recently, aged 56. He was a member of the surgical staff of Grant Hospital.

ABRAHAM J. LEVY, Dixon, who graduated at Northwestern University Medical School in 1930, died Au-

gust 26, aged 52. He had been health officer at the Dixon State Hospital for the last six years.

FREDERICK J. RILEY, retired, Chicago, who graduated at Barnes Medical College, St. Louis, in 1901, died August 6, aged 73. He was a member of the Health Department staff for 25 years.

MITCHELL M. SELLETT, LaSalle, who graduated at Loyola University School of Medicine in 1922, died August 21, aged 53.

EARL A. SOULE, East Moline, who graduated at The Hahnemann Medical College and Hospital, Chicago, in 1901, died August 9, aged 72.

JOHN RUDOLPH VAHLTEICH, retired, Chicago, who graduated at Rush Medical College in 1899, died in New Jersey, July 9, aged 84 of coronary thrombosis.

HENRY JARRISON VAUPELL, retired, Chicago, who graduated at Rush Medical College in 1897, died August 29, aged 73.

FOR THE COMMON GOOD

Health Talk Televised on WGN-TV.—Since the last issue of the Illinois Medical Journal, the following telecasts have been presented:

Samuel G. Plice and Charles W. Pfister, Chicago, August 17, How's Your Blood Pressure, showing the manner in which blood pressure was originally determined, different types of blood pressure equipment and an explanation of the meaning of the pressure itself.

Morris Friedell and Fenton Schaffner, Chicago, August 24, Radioactive Research in Medicine, demonstrating the meaning of radioactive isotopes, the demonstration of Geiger counters, the register. Patients were used to show the progress of radioactive iodine through the body.

George Wiltrakis, Richard Graff, Peoria, and Dr. Van Dellen, September 7, the "Old" Look in Mental Care, in which obsolete equipment used for the treatment of mentally ill persons was exhibited by the staff of the Chicago Office of the Illinois State Medical Society.

H. Worley Kendell and Louis B. Newman, Chicago, September 14, Building a New Life, in which two paraplegia from Veterans Administration, Hines, displayed the basic and progressive steps in rehabilitation and vocational therapy.

Lectures Arranged Through the Educational Committee of the Illinois State Medical Society:

Edwin F. Hirsch, Roundtable on Euthanasia before the YMCA Association of Chicago, September 26.

I. Michael Levin, Frederic Chopin PTA in Chicago, October 6, on Problems of Parenthood.

Ralph Spaeth, Forest Ridge Woman's Club in Oak Forest, October 19, on Trying to Understand the Adolescent.

P. V. Dilts, Springfield, Menard County Branch of the Association of University Women in Athens, October 18, on Arthritis.

Joan Fleming, Lakeview Woman's Club in Chicago, November 1, on Mental Attitudes in Health.

Lawrence Breslow, Chicago, Frederic Chopin PTA in Chicago, November 3, on Understanding the Adolescent.

Theodore R. Van Dellen, Chicago, Woman's Auxiliary, West Side Branch, Chicago Medical Society, November 18, on Television Medicine.

Irving Steck, Chicago, Gage Park Woman's Club, November 8, on Arthritis.

Harry J. Dooley, Oak Park, Norwood Park PTA, November 15, on Sex Hygiene in Grammar School.

Lectures Arranged Through the Scientific Service Committee: Everett P. Coleman, Canton, Illinois Chapter, American Academy of General Practice in Peoria, October 10, on Tumors of the Thyroid.

Kurt Glaser, Chicago, Knox County Society in Galesburg, October 20, on Poliomyelitis.

Arthur J. Atkinson, Chicago, St. Clair County Medical Society in East St. Louis, November 3, on Management of Peptic Ulcer.

Israel Davidsohn, Chicago, La Salle County Medical Society and the North Central Illinois Medical Association, November 3, on Blood Transfusions: Indications, Contra-Indications and Untoward Reactions, illustrated.

E. Harold Ennis, Springfield, Henry County Medical Society in Kewanee, November 10, on Rh Factor.

Charles N. Pease, Chicago, Iroquois County Medical Society in Watseka, November 15, on Low Back Pain.

Warren H. Cole, Chicago, Macon County Medical Society in Decatur, November 15, on Gallbladder Disease, illustrated.

George Byfield, Chicago, Effingham County Medical Society in Effingham, November 17, Some Problems in the Diagnosis and Treatment of Undulant Fever.

Samuel M. Feinberg, Chicago, DeKalb County Medical Society in DeKalb, November 22, on Allergy: Accomplishments, Limitations and Aspirations.

Norris J. Heckel, Chicago, McDonough County Medical Society in Macomb, November 25, on Hematuria, illustrated.

Lindon Seed, Chicago, Sangamon County Medical Society in Springfield, December 1, on Present Treatment of Thyroid Disease.

Postgraduate Conference for Mount Vernon.—A postgraduate conference has been arranged for the

Ninth Councilor District at the Emmerson Hotel, Mount Vernon, October 26, with Dr. Charles O. Lane, West Frankfort, Councilor of the District, presiding.

Chicago speakers include:

Harry M. Hedge, Dermatology as Seen by the General Practitioner.

Archibald Hoyne, Poliomyelitis.

Robert S. Berghoff, Coronary Disease.

Harold M. Camp, The Fight is Not Over.

Eugene M. Hamilton, Fundamental Principles in the Care of Fractures.

Charles D. Krause, Threatened Abortion.

A roundtable discussion will conclude the afternoon program. Following dinner, Dr. Walter Stevenson, Quincy, President of the Illinois State Medical Society, will give a few remarks on the society's activities and deliver a scientific presentation entitled "Squint, a Medical and Economic Problem."

A luncheon will open the day's program with the Jefferson-Hamilton County Medical Societies acting as host. The program was arranged through the Postgraduate Education Committee of the Illinois State Medical Society, of which Dr. Berghoff is Chairman and George Hellmuth, Chicago, Vice Chairman.

VETERINARIANS AND HEALTH OFFICERS TO MEET

Mutual interests will bring veterinarians and public health officers together at Springfield on November 16 and 17.

The meeting has been designed to provide an opportunity for the two groups to meet, get better acquainted, and in this way clarify some of the areas of common medical and mutual interests toward a better public health.

Roland R. Cross, M.D., Director of Illinois State Department of Public Health, will address the dinner meeting on November 16. L. R. Davenport, D.V.M., will preside at this meeting.

Environment is part of the treatment of tuberculosis. It is well established that recovery from infection is facilitated by good nutrition, adequate sleep, mental peace, and the many intangible factors which may be included in the term "environment." Any hospital or sanatorium which does not give full cognizance to these fundamental physiologic and psychosomatic factors is not carrying out a complete therapeutic program. It may even be delaying the date of dismissal of patients and adding to the misery of patients and the expense borne by tax-payers. Money expended for job training, decorations, music, and flowers may be justified as truly as money spent for opiates or surgical treatment. H. Corwin Hinshaw, M.D., Nat. Tuberc. A. Tr.

The **ILLINOIS** *Medical Journal*

Official Journal of the Illinois State Medical Society

Harold M. Camp, EDITOR. Theodore R. Van Dellen, ASSOCIATE EDITOR.

EDITORIAL BOARD — James H. Hutton, Chairman, Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher, Harry Culver, Walter Stevenson, Raymond W. McNealy, Arkell M. Vaughn.

Vol. 96, No. 5



November, 1949

AWARDS FOR OUTSTANDING PAPERS PUBLISHED IN THE JOURNAL

The Editorial Board and the Journal Committee held a joint meeting recently to select the outstanding papers published in the Illinois Medical Journal during the 1948-1949 fiscal year. Consideration was given to papers published from July 1948 through June 1949. In keeping with previous regulations, the papers were considered in two classes: (a) for the best paper from a literary standpoint and (b) for the most outstanding original work presented in a paper or scientific editorial.

As previously stated, papers written by members of the Illinois State Medical Society were the only ones eligible for the awards. The joint committee discovered that many fine papers had been published during the year, and it was a difficult task indeed to determine which were entitled to the prizes.

Papers were considered under a plan previously agreed upon by the group.

1. What does the article contribute scientifically?
2. How easy is it to read?
3. The construction and grammar
4. With what authority does the author speak?
(bibliography, research, etc)

Each member of this joint committee had been going over all papers and scientific editorials for several weeks prior to the meeting and each in turn listed those which they thought were worthy of a more critical consideration. After a considerable amount of discussion and the final vote was taken, the following awards were made:

Class A — the best written article
"Intrathecal Therapy Contraindicated for Meningitis"

Archibald L. Hoyne, Chicago, published in the November 1948 issue of the Journal.

Class B — outstanding original work
"The Clinical Interpretation of Sternal Puncture"

Paul L. Bedinger and Louis R. Limarzi, Chicago, published in the December, 1948 issue of the Journal.

In view of the fact that many papers were of high class and were seriously considered for the awards, it was generally agreed that the joint committee would recommend to the Council that in future years instead of giving cash awards, certificates or medals should be given, somewhat similar to the awards given each year during the annual meeting to the outstanding scientific exhibits prepared by members of the Society.

It was the desire of all members present at this meeting that more publicity be given in the



Archibald L. Hoyne



Paul L. Bedinger



Louis R. Limarzi

Winners of Illinois Medical Journal Awards

Journal relative to the type of papers that are desired for publication. Many articles during the past year have been returned to authors because they were too long, or for the reason that they were not considered as being of sufficient interest to the average reader of the Journal. Many of these were shortened and accepted later, while others were submitted to some of the speciality journals for publication.

The Editorial Board and the Journal Committee are anxious to see members of the Society submit papers on timely subjects which will be of greater interest to the physicians of Illinois as a whole, rather than too highly technical papers of interest to a relatively small percentage of the readers of the Journal. Likewise it is generally desired that we publish as many papers as possible in each issue of the Journal. With this in mind it seems quite obvious that papers need not be long to give the desired information.

Those responsible for the publication of the Illinois Medical Journal once more wish to thank the many authors for the fine papers which have been submitted for publication during the past year and likewise give assurance that all papers received will be given careful consideration in the future.

Tuberculosis is preventable and eradicable. In the United States it causes one death every nine minutes. Illinois needs 3000 additional sanitarium beds.

ACTH AND CORTISONE

We will need to change many of our concepts of certain diseases if cortisone and adrenocorticotropin (ACTH) live up to the expectations of present clinical evidence. From the reports to date, there has been nothing so dramatic in medicine. Few if any remedies have done so much in a short time. The compounds are being used in arthritis, gout, rheumatic fever, myasthenia gravis, depressive states, nephritis, psoriasis, pemphigus, lupus erythematosus, periarteritis nodosa, and other chronic diseases. Thus far, the results in general have been good. Time will tell, however, as all new products must be digested clinically before the final analysis. At any rate, we hope for the best.

Premature publicity has led to a tremendous demand for these substances. This is unfortunate especially for physicians who are trying earnestly to evaluate the hormones and for victims of chronic and incurable ailments who must wait until the compounds become available generally. In this respect, "what we do not know, we do not miss" is applicable. On the other hand, premature publicity in this day and age can hardly be avoided when medical news is not kept within the profession but is shared by all.

ACTH is obtained from the anterior lobe of the pituitary glands of hogs; cattle and sheep pituitaries are not used because the yield is too small. According to Armour and Company, it takes about 400,000 hog pituitaries to make a

pound of ACHT and, at the present production rate, approximately 60 pounds can be made annually. From this amount it is possible to obtain 2,800,000 ten-milligram dose units. But since the daily starting dose in arthritis is approximately 100 mg., it is obvious that much more will be needed. Furthermore, ACHT is not curative; unless a maintenance dose is continued, symptoms return. As it now stands there will not be enough to treat all of our arthritic patients, let alone victims of other diseases. It has been estimated that production must increase from five to ten thousand times the present rate to supply the current demand.

Research is being conducted to increase the yield, to experiment with smaller doses, and to synthesize ACTH. Insulin has resisted synthesis for over 25 years and if ACTH follows suit, little can be expected along this line. The solution may be found through cortisone, however, which is being investigated with equal vigor. This secretion is extracted with difficulty from ox bile but there are other sources (yams and strophanthus seeds) that may increase the output tremendously. Furthermore, the adrenal cortex produces twenty-eight distinct steroids and it is possible that some of these chemicals may have an action similar to cortisone. The real answer lies in chemistry because a synthetic product would solve the manufacturing problem and place the drugs within reach of the average pocketbook.

At the present time the remedies are not available for treatment except in certain research centers and on carefully selected patients. This is understandable because the hormones are as potent as they are scarce. They have, in addition to their action on the connective tissue, a definite metabolic effect on the body which will require careful evaluation. Euphoria is a frequent accompaniment and the electrolytic balance is altered. It is possible that other physiological changes occur especially when administered over a long period of time.

AS THEY SEE IT

The British system of socialized medicine has presented many problems to the specialists and general practitioners of England. From time to time their difficulties are aired in the medical journals; some are in a humorous vein, others are more serious, but we hope not indicative of

the hand writing on the wall. In the September 3, 1949, issue of the British Medical Journal several examples are to be found in the section for "Correspondence" and "Questions Answered." In one of these, the following argument is used by a practitioner who is irate because he cannot be his own doctor:

"If any notice is taken of the Minister's ruling it will be particularly unfair to the doctor practising in an isolated village, for it will mean that he alone of all the village is denied the benefits of the Health Service, while still being obliged to pay for it in stamps and taxation. It will also be unfair to the man who knows that his own treatment is the best available in the district (and in spite of this Government's exaltation of mediocrity for its own sake there must usually be a best). Is he to be compelled to accept second best or pay for his medicine? This seems very far removed from the Minister's rosy promises."

Another question centers about a specialist who is befuddled about the regulations governing the payment of mileage. "I am a full-time surgeon living 'out' three miles from the hospital. I am obliged to travel daily at least once and am on duty every third twenty-four hours for emergencies. There is also domiciliary work. Am I entitled to call myself a 'regular' user and to receive £52 per annum and 3½d. per mile over 2,000 miles? If not, to what am I entitled?" The answer to his question at first reminded us of Army regulations. But, as we continued, the answer became more and more complex. It is too long to include in this editorial but we might add that Army regulations were never this complicated. To learn the rules and regulations, benefits and privileges of socialized medicine would require another year in medical school, unless, of course, an expert could be hired as we now do in computing our income tax. Up until this time we have been aware of the problems associated with keeping detailed records on patients but this business of doing the same with mileage is a horse of another color.

A suggestion also was made that the profession would fare better if it were organized as a medical trade union. They cite Webbs' definition of trade unionism: "A trade union as we understand the term is a continuous association of wage-earners for the purpose of maintaining or improving the conditions of their employ-

ment. The purpose of the trade union is the protection of the standard of life—that is to say, the organized resistance to any innovation likely to tend to the degradation of the wage-earners.” The argument continues and the advantages are cited. It boiled down to the fact that the medical profession at it stood was “materially impotent in our negotiations with the Government.” The writer then became more practical by acknowledging that “we, too, are workers, or wage-earners, in the full sense of the word. Let us organize ourselves accordingly.”

Physicians, in general, abhor the idea of being unionized as a trade. But anything is possible, of course, when conditions become so desperate that a choice must be made to survive.

ACTIVITIES OF COMMITTEE ON MEDICAL HISTORY

The Committee on Medical History is engaged in assembling data for the use of whoever is finally selected to write the next volume of medical history. Miss Ella Salmonsens, medical librarian at the John Crerar Library, is in charge of this work. She is assisted by Miss Carr, librarian at Northwestern University Medical School, and Miss Price, reference librarian at the same institution. Members of the Woman's Auxiliary are also working on this. Among other things they are at the moment writing the history of medical journals. The Crerar Library has been made the official depository of historical material of the Illinois State Medical Society.

The Committee needs histories of county medical societies. We already have several. Dr. F. Garm Norbury recently sent one of the Morgan County Medical Society and also a history of Illinois Medical College, which at one time was located in Jacksonville. Both of these were edited by the late Dr. Carl E. Black. The high lights of medicine of Winnebago County were contributed by Dr. John H. Maloney. The history of Warren County is being written by Dr. Charles P. Blair. The story of Will County has been completed by Dr. Marion H. Bowles. Dr. Leslie W. Young is beginning an account of Wayne County. Dr. Andy Hall has sent in a lot of interesting and valuable information regarding his section of the state. Dr. E. B.

Montgomery of Quincy has sent in a great deal of material, some of which could probably have been acquired from no one except Dr. Montgomery. He has supplied the history of Adams and adjoining counties and the military tract and the history of obstetrics and gynecology in Adams County and other valuable material. Dr. Helga Ruud has written a story of the Woman's Medical College in Chicago and an introduction to the history of medical women in Illinois.

A number of counties have appointed historians and, as indicated above, some of them have about completed their work. The Committee is very anxious to hear from the others.

MEDICAL ETHICS

On June 4, 1850 the Illinois State Medical Society met in Springfield to reorganize. Having come to order in the State Library Room, Dr. Rudolphus Rouse of Peoria assumed the chair on the motion of Dr. Herrick of Chicago. That afternoon the House adopted a Constitution and By-Laws and elected officers for the coming year.

These physicians set about, as their first order of business, the establishing of that intangible, elusive quality — ethics. Under high standards they waved the various banners of “The duties of physicians to their Patients” — this was first and foremost even as it is today. Then followed a list of the “Obligations of Patients to their Physicians”. However, these early men had no public relations bureau to publicize the public's duty to physicians. These tireless family doctors said, hopefully, “A patient should never weary his physician with tedious detail of events or matters not appertaining to his disease”.

Interesting sidelights on “The Duties of Physicians to Each Other and to the Profession at Large” follow. Article One lists the duties for the support of professional character. Consultations were important events in those days, and if the routine procedure advocated in 1850 were followed today, few chance remarks of one physician about another would clutter the law courts of the country.

“The Principles of Medical Ethics” have come down through the centuries from the Oath of Hippocrates. The various state societies have turned this writing of unwritten principles over to the American Medical Association. Revision has followed revision as new problems arose.

The Principles of Medical Ethics of the American Medical Association which were adopted by the House of Delegates of the A.M.A. at the Atlantic City meeting in 1949 follow this article.

Each member of this Society should read and study this material. The art of medicine is embodied in these principles, at it has been since the gods on Olympus gave mortals their first taste of the milk of human kindness.

Certain changes have been made — the dissemination of educational material is not advertising — contracts are defined.

The Principles of Medical Ethics will soon be available in booklet form, and each member of the Illinois State Medical Society may secure a copy by writing to the office of the Secretary, Monmouth.

PRINCIPLES OF MEDICAL ETHICS

CHAPTER I

GENERAL PRINCIPLES

Character of the Physician

Section 1.—The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals. A physician should be "an upright man, instructed in the art of healing." He must keep himself pure in character and be diligent and conscientious in caring for the sick. As was said by Hippocrates, "He should also be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life."

THE PHYSICIAN'S RESPONSIBILITY

Sec. 2—"The profession of medicine, having for its end the common good of mankind, knows nothing of national enmities of political strife, of sectarian dissensions. Disease and pain the sole conditions of its ministry, it is disquieted by no misgivings concerning the justice and honesty of its client's cause; but dispenses its peculiar benefits without stint or scruple, to men of every country, and party and rank, and religion, and to men of no religion at all."

GROUPS AND CLINICS

Sec. 3—The ethical principles actuating and governing a group or clinic are exactly the same as those applicable to the individual. As a group or clinic is composed of individual physicians, each of whom, whether employer, employee or partner, is subject to the principles of ethics herein elabo-

rated, the uniting into a business or professional organization does not relieve them either individually or as a group from the obligation they assume when entering the profession.

ADVERTISING

Sec. 4—Solicitation of patients, directly or indirectly, by a physician, by groups of physicians or by institutions or organizations is unethical. This principle protects the public from the advertiser and salesman of medical care by establishing an easily discernible and generally recognized distinction between him and ethical physician. Among unethical practices are included the not always obvious devices of furnishing or inspiring newspaper or magazine comments concerning cases in which the physician or group or institution has been, or is, concerned. Self laudations defy the traditions and lower the moral standard of the medical profession; they are an infraction of good taste and are disapproved.

EDUCATIONAL INFORMATION NOT ADVERTISING

Sec. 5—Many people, literate and well educated, do not possess a special knowledge of medicine. Medical books and journals are not easily accessible or readily understandable.

The medical profession considers it ethical for a physician to meet the request of a component or constituent medical society to write, act or speak for general readers or audiences. The adaptability of medical material for presentation to the public may be perceived first by publishers, motion picture producers or radio officials.

These may offer to the physician opportunity to release to the public some article, exhibit or drawing. Refusal to release the material may be considered a refusal to perform a public service, yet compliance may bring the charge of self seeking or solicitation. In such circumstances, the physician should be guided by the decision of official agencies established through component and constituent medical organizations.

A physician who desires to know whether, ethically, he may engage in a project aimed at health education of the public should request the approval of the designated officer or committee of his county medical society.

The most worthy and effective advertisement possible, even for a young physician, especially among his brother physicians, is the establishment of a well merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication or circulation of simple professional cards is approved in some localities but is disapproved in others. Disregard of local customs and offenses against recognized ideals are unethical.

The promise of radical cures or boasting of cures or of extraordinary skill or success is unethical.

An institution may use means, approved by the medical profession in its own locality, to inform the

public of its address and the special class, if any, of patients accommodated.

PATENTS, COMMISSIONS, REBATES AND SECRET REMEDIES

Sec. 6.—An ethical physician will not receive remuneration from patents on or the sale of surgical instruments, appliances and medicines, nor profit from a copyright on methods or procedures. The receipt of remuneration from patents or copyrights tempts the owners thereof to retard or inhibit research or to restrict the benefits derivable therefrom to patients, the public or the medical profession. The acceptance of rebates on prescriptions or appliances, or of commissions from attendants who aid in the care of patients is unethical. An ethical physician does not engage in barter or trade in the appliances, devices or remedies prescribed for patients, but limits the sources of his professional income to professional services rendered only in the amount of his fee specifically announced to his patient at the time the service is rendered or in the form of a subsequent statement, and he should not accept additional compensation secretly or openly, directly or indirectly, from any other source.

The prescription or dispensing by a physician of secret medicines or other secret remedial agents, of which he does not know the composition, or the manufacture or promotion of their use is unethical.

EVASION OF LEGAL RESTRICTIONS

Sec. 7.—An ethical physician will observe the laws regulating the practice of medicine and will not assist others to evade such laws.

CHAPTER II DUTIES OF PHYSICIANS TO THEIR PATIENTS

Standards, Usefulness, Nonsectarianism

Sec. 1.—In order that a physician may best serve his patients, he is expected to exalt the standards of his profession and to extend its sphere of usefulness. To the same end, he should not base his practice on an exclusive dogma or a sectarian system, for "sects are implacable despots; to accept their thralldom is to take away all liberty from one's action and thought."* A sectarian or cultist as applied to medicine is one who alleges to follow or in his practice follows a dogma, tenet or principle based on the authority of its promulgator to the exclusion of demonstration and scientific experience. All voluntarily associated activities with cultists are unethical. A consultation with a cultist is a futile gesture if the cultist is assumed to have the same high grade of knowledge, training and experience as is possessed by the doctor of medicine. Such consultation lowers the honor and dignity of the profession in the same degree in which it elevates the honor and dignity of those who are irregular in training and practice.

PATIENCE, DELICACY AND SECRECY

Sec. 2.—Patience and delicacy should characterize the physician. Confidences concerning individual or domestic life entrusted by patients to a physician and defects in the disposition or character of

patients observed during medical attendance should never be revealed unless their revelation is required by the laws of the state. Sometimes, however, a physician must determine whether his duty to society requires him to employ knowledge, obtained through confidences entrusted to him as a physician, to protect a healthy person against a communicable disease to which he is about to be exposed. In such instance, the physician should act as he would desire another to act toward one of his own family in like circumstances. Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications.

PROGNOSIS

Sec. 3.—The physician should neither exaggerate nor minimize the gravity of a patient's condition. He should assure himself that the patient, his relatives or his responsible friends have such knowledge of the patient's condition as will serve the best interests of the patient and the family.

THE PATIENT MUST NOT BE NEGLECTED

Sec. 4.—A physician is free to choose whom he will serve. He should, however, respond to any request for his assistance in an emergency or whenever temperate public opinion expects the service. Once having undertaken a case, the physician should not neglect the patient, nor should he withdraw from the case without giving notice to the patient, his relatives, or his responsible friends sufficiently long in advance of his withdrawal to allow them to secure another medical attendant.

CHAPTER III DUTIES OF PHYSICIANS TO EACH OTHER AND TO THE PROFESSION AT LARGE ARTICLE I.—Duties to the Profession UPHOLDING THE HONOR OF THE PROFESSION

Sec. 1.—A physician is expected to uphold the dignity and honor of his vocation.

MEMBERSHIP IN MEDICAL SOCIETIES

Sec. 2.—For the advancement of his profession, a physician should affiliate with medical societies and contribute of his time, energy and means so that these societies may represent the ideals of the profession.

SAFEGUARDING THE PROFESSION

Sec. 3.—Every physician should aid in safeguarding the profession against admission to it of those who are deficient in moral character or education.

Sec. 4.—A physician should expose, without fear or favor, incompetent or corrupt, dishonest or unethical conduct on the part of members of the profession. Questions of such conduct should be considered, first, before proper medical tribunals in executive sessions or by special or duly appointed committees on ethical relations, provided such a course is possible and provided, also, that the law is not hampered thereby. If doubt should arise as to the legality of the physician's conduct, the situation under investigation may be placed before officers of the law, and the physician-investigators

may take the necessary steps to enlist the interest of the proper authority.

ARTICLE II.—PROFESSIONAL SERVICES OF PHYSICIANS TO EACH OTHER

Dependence of Physicians on Each Other

Sec. 1.—As a general rule, a physician should not attempt to treat members of his family or himself. Consequently, a physician should cheerfully and without recompense give his professional services to physicians or their dependents if they are in his vicinity.

COMPENSATIONS FOR EXPENSES

Sec. 2.—When a physician from a distance is called to advise another physician about his own illness or about that of one of his family dependents, and the physician to whom the service is rendered is in easy financial circumstances, a compensation that will at least meet the traveling expenses of the visiting physician should be proffered him. When such a service requires an absence from the accustomed field of professional work of the visitor that might reasonably be expected to entail a pecuniary loss, such loss may, in part at least, be provided for in the compensation offered.

ONE PHYSICIAN IN CHARGE

Sec. 3.—When a physician or a member of his dependent family is seriously ill, he or his family should select one physician to take charge of the case. The family may ask the physician in charge to call in other physicians to act as consultants.

ARTICLE III.—DUTIES OF PHYSICIANS IN CONSULTATIONS
CONSULTATIONS SHOULD BE ENCOURAGED

Sec. 1.—In a case of serious illness, especially in doubtful or difficult conditions, the physician should request consultations.

CONSULTATION FOR PATIENT'S BENEFIT

Sec. 2.—In every consultation, the benefit to the patient is of first importance. All physicians interested in the case should be candid with the patient, a member of his family or a responsible friend.

PUNCTUALITY

Sec. 3.—All physicians concerned in consultations should be punctual. When, however, one or more of the consultants are unavoidably delayed, the one who arrives first should wait for the others for a reasonable time, after which the consultation should be considered postponed. When the consultant has come from a distance, or when for any other reason it will be difficult to meet the physician in charge at another time, or if the case is urgent, or it be the desire of the patient, his family or his responsible friends, the consultant may examine the patient and mail his written opinion, or see that it is delivered under seal to the physician in charge. Under these conditions, the consultant's conduct must be especially tactful; he must remember that he is framing an opinion without the aid of the physician who has observed the course of the disease.

PATIENT REFERRED TO CONSULTANT

Sec. 4.—When a patient is sent to a consultant and the physician in charge of the case cannot accompany the patient, the physician in charge should provide the consultant with a history of the case, together with the physician's opinion and outline of the treatment, or so much of this as may be of service to the consultant. As soon as possible after the consultant has seen the patient he should address the physician in charge and advise him of the results of the consultant's investigation. The opinions of both the physician in charge and the consultant are confidential and must be so regarded by each.

DISCUSSIONS IN CONSULTATION

Sec. 5.—After the physicians called in consultation, have completed their investigations, they and the physician in charge should meet by themselves to discuss the course to be followed. Statements should not be made nor should discussion take place in the presence of the patient, his family or his friends, unless all physicians concerned are present or unless all of them have consented to another arrangement.

RESPONSIBILITY OF ATTENDING PHYSICIAN

Sec. 6.—The physician in charge of the case is responsible for treatment of the patient. Consequently, he may prescribe for the patient at any time and is privileged to vary the treatment outlined and agreed on at a consultation whenever, in his opinion, such a change is warranted. However, after such a change, it is best to call another consultation; then the physician in charge should state his reasons for departure from the course decided at the previous conference. When an emergency occurs during the absence of the physician in charge, a consultant may assume authority until the arrival of the physician in charge, but his authority should not extend further without the consent of the physician in charge.

CONFLICT OF OPINION

Sec. 7.—Should the physician in charge and a consultant be unable to agree in their view of a case, another consultant should be called or the differing consultant should withdraw. However, since the patient employed the consultant to obtain his opinion, he should be permitted to state it to the patient, his relative or his responsible friend, in the presence of the physician in charge.

CONSULTANT AND ATTENDANT

Sec. 8.—When a physician has acted as consultant in an illness, he should not become the physician in charge in the course of that illness, except with consent of the physician who was in charge at the time of the consultation.

ARTICLE IV. DUTIES OF PHYSICIANS IN CASES OF INTERFERENCE
MISUNDERSTANDINGS TO BE AVOIDED

Sec. 1.—A physician, in his relationship with a patient who is under the care of another physician, should not give hints relative to the nature and treat-

ment of the patient's disorder; nor should a physician do anything to diminish the trust reposed by the patient in his own physician. In embarrassing situations, or whenever there seems to be a possibility of misunderstanding with a colleague, a physician should seek a personal interview with his fellow.

SOCIAL CALLS ON PATIENT OF ANOTHER PHYSICIAN

Sec. 2.—When a physician makes social calls on another physician's patient he should avoid conversation about the patient's illness.

SERVICES TO PATIENT OF ANOTHER PHYSICIAN

Sec. 3.—A physician should not take charge of, or prescribe for another physician's patient during any given illness (except in an emergency) until the other physician has relinquished the case or has been formally dismissed.

CRITICISM TO BE AVOIDED

Sec. 4.—When a physician does succeed another physician in charge of a case, he should not disparage, by comment or insinuation, the one who preceded him. Such comment or insinuation tends to lower the confidence of the patient in the medical profession and so reacts against the patient, the profession and the critic.

EMERGENCY CASES

Sec. 5.—When a physician is called in an emergency because the personal or family physician is not at hand, he should provide only for the patient's immediate need and should withdraw from the case on the arrival of the personal or family physician. However, he should first report to the personal or family physician the condition found and the treatment administered.

PRECEDENCE WHEN SEVERAL PHY- SICIANS ARE SUMMONED

Sec. 6.—When several physicians have been summoned in a case of sudden illness or of accident, the first to arrive should be considered the physician in charge. However, as soon as is practicable, or on the arrival of the acknowledged personal or family physician, the first physician should withdraw. Should the patient, his family or his responsible friend wish some one other than he who has been in charge of the case, the patient or his representative should advise the personal or family physician of his desire. When, because of sudden illness or accident, a patient is taken to a hospital without the knowledge of the physician who is known to be the personal or family physician, the patient should be returned to the care of the personal or family physician as soon as is feasible.

A COLLEAGUE'S PATIENT

Sec. 7.—When a physician is requested by a colleague to care for a patient during the colleague's temporary absence, or when because of an emergency a physician is asked to see a patient of a colleague, the physician should treat the patient in the same manner and with the same delicacy that

he would wish used. The patient should be returned to the care of the attending physician as soon as possible.

SUBSTITUTION IN OBSTETRIC WORK

Sec. 8.—When a physician attends a woman who is in labor because the one who was engaged to attend her is absent, the physician summoned in the emergency should resign the patient to the first engaged, on his arrival. The one in attendance is entitled to compensation for the professional service he may have rendered.

ARTICLE V.—DISPUTES BETWEEN PHY- SICIANS—ARBITRATION

Sec. 1.—Whenever there arises between physicians a grave difference of opinion, or of interest, which cannot be promptly adjusted, the dispute should be referred for arbitration, preferably to an official body of a component society.

ARTICLE VI.—COMPENSATION LIMITS OF GRATUITOUS SERVICE

Sec. 1.—Poverty of a patient, and the obligation of physicians to attend one another and the dependent members of the families of one another, should command the gratuitous services of a physician. Institutions and organizations for mutual benefit, or for accident, sickness and life insurance, or for analogous purposes, should meet such costs as are covered by the contract under which the service is rendered.

CONDITIONS OF MEDICAL PRACTICE

Sec. 3.—A physician should not dispose of his services under conditions that make it impossible to render adequate services of a patient, except under circumstances in which the patients concerned might be deprived of immediately necessary care.

CONTRACT PRACTICE

Sec. 2.—Contract practice as applied to medicine means the practice of medicine under an agreement between a physician or a group of physicians, as principals or agents, and a corporation, organization, political subdivision or individual, whereby partial or full medical services are provided for a group or class of individuals on the basis of a fee schedule, or for a salary or for a fixed rate per capita.

Contract practice *per se* is not unethical. Contract practice is unethical if it permits of features or conditions that are declared unethical in these Principles of Medical Ethics or if the contract or any of its provisions causes deterioration of the quality of the medical services rendered.

FREE CHOICE OF PHYSICIAN

Sec. 4.—Free choice of physician is defined as that degree of freedom in choosing a physician which can be exercised under usual conditions of employment between patients and physicians. The interjection of a third party who has a valid interest, or who intervenes between the physician and the patient does not *per se* cause a contract to be unethical. A third party has a valid interest when, by law or volition, the third party assumes legal responsibility and

provides for the cost of medical care and indemnity for occupational disability.

COMMISSIONS

Sec. 5.—When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, the giving or receiving of a commission by whatever term it may be called or under any guise or pretext whatsoever is unethical.

PURVEYAL OF MEDICAL SERVICE

Sec. 6.—A physician should not dispose of his professional attainments or services to any hospital, lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions, which permit exploitation of the services of the physicians for the financial profit of the agency concerned. Such a procedure is beneath the dignity of professional practice and is harmful alike to the profession of medicine and the welfare of the people.

CHAPTER IV

The Duties of Physicians To The Public PHYSICIANS AS CITIZENS

Section 1.—Physicians, as good citizens, possessed of special training, should advise concerning the health of the community wherein they dwell. They should bear their part in enforcing the laws of the community and in sustaining the institutions that advance in the interest of humanity. They should cooperate especially with the proper authorities in the administration of sanitary laws and regulations.

PUBLIC HEALTH

Sec. 2.—Physicians, especially those engaged in public work, should enlighten the public concerning quarantine regulations and measures for the prevention of epidemic and communicable diseases. At all times the physicians should notify the constituted public health authorities of every case of communicable disease under his care, in accordance with the laws, rules and regulations of the health authorities. When an epidemic prevails, a physician must continue his labors without regard to the risk of his own health.

PHARMACISTS

Sec. 3.—Physicians should recognize and promote the practice of pharmacy as a profession and should recognize the cooperation of the pharmacist in education of the public concerning the practice of ethical and scientific medicine.

CONCLUSION

These principles of medical ethics have been and are set down primarily for the good of the public and should be observed in such a manner as shall merit and receive the endorsement of the community. The life of the physician, if he is capable, honest, decent, courteous, vigilant and a follower of the Golden Rule, will be in itself the best exemplification of ethical principles.

Respectfully submitted: Edward R. Cuniffe, Chairman, Louis A. Buie, Walter F. Donaldson, Homer L. Pearson, Jr., John H. O'Shea.

THE WORLD MEDICAL ASSOCIATION

The World Medical Association was organized in Paris in September, 1947. At the present time forty national medical associations have affiliated with this group, and some 60 associations are eligible. Louis H. Bauer of New York is the Secretary General of the group and has urged that the various state societies throughout this country promote the membership campaign.

The objectives of the World Medical Association are:

- (1) To promote closer ties among national medical associations and doctors.
- (2) To maintain the honor and protect the interests of the medical profession.
- (3) To study and report on professional problems.
- (4) To organize an exchange of information on matters of interest to the medical profession.
- (5) To present the world medical opinion to WHO and UNESCO.
- (6) To assist all people of the world to attain the highest possible level of health.
- (7) To promote world peace.

About \$100,000 a year is needed to carry out the work of the United States Committee of which Louis H. Bauer is the Secretary-Treasurer. The cost of an individual membership is \$10.00 a year, with the understanding that membership will be continued for five years unless the doctor notifies the Committee that he does not desire to continue his membership. For this \$10.00 he will receive a certificate of membership, the World Medical Association Bulletin (published quarterly), all publications of the Association, and letters of introduction to foreign medical associations if he travels in other countries.

The World Medical Association has been approved by the American Medical Association, and by the various state societies throughout this country. We have been asked to promote membership in every way possible.

Application blanks may be secured by writing to

Dr. Harold M. Camp, Secretary
Illinois State Medical Society
Monmouth, Illinois

You will note that the membership is not restricted to physicians only, and that many loyal laymen have contributed their \$10.00. You

might want to add your name to this list of original members from Illinois. This state is not too well represented and we will be only too glad to hear from new members.

Ackley, W. O., M. D., Chicago, Adland, Moris A., M. D., Peoria, Allen, Thomas D., M. D., Chicago, Anday, George J., M. D., Chicago, Anderson, Donald G., M. D., Glencoe, Austin, V. Thomas, M. D., Urbana, Blair, Earl H., M. D., Chicago, Barborka, Dr. Clifford J., Chicago, Brenaus, Herbert C., M. D., Oak Park, Burket, Walter Cleveland, M. D., Evanston.

Callahan, Dr. James J., Oak Park, Camp, Harold M., M. D., Monmouth, Cargill, Mr. Frank, Park Ridge, Clough, Mr. S. DeWitt, Abbott Laboratories, North Chicago, Coleman, George H., M. D., Chicago, Compere, Edward L., M. D., Chicago, Curtis, George G., M. D., Chicago, Cushman, Beulah, M. D., Chicago, Davis, Nathan Smith, M. D., F.A.C.P., Chicago, Fenwick, Herbert F., M. D., Chicago, Fishbein, Morris, M. D., Chicago, Ford, William K., M. D., Rockford, Friedberg, Stanton A., M. D., Chicago, Furey, Warren W., M. D., Chicago, Gilbert, N. C., M. D., Chicago, Giles, Roscoe C., M. D., Chicago, Golden, I. J. K., M. D., Chicago, Gowdy, Franklin K., M. D., Winnetka, Gunnar, Herman P., M. D., Berwyn.

Henderson, B. D., Mr., Chicago, Hendricks, Mr. Thomas A., American Medical Association, Chicago, Herbst, Robert H., M. D., Chicago, Hightower, Jenkins, M. D., Chicago, Hoffman, H. O., M. D., Decatur, Holloway, Jr., Mr. J. W. American Medical Association, Chicago, Hopkins, Percy E., M. D., Chicago, Irons, E. E., M. D., Chicago, Johns, Clara, M. D., Dixon, Kelly, Frank B., M. D., Chicago, Kern, Maximilian, M. D., Chicago, Kerwin, R. W., M. D., Chicago, Krol, Edward J., M. D., Chicago, Lawrence-Wabash County Health Dept., Lawrence-

ville, Lawson, Edwin H., M. D., Chicago, Leblanc, F., M. D., Elgin, Lewis, Willis I., M. D., Herrin, Livingston, A. Edward, Dr., Bloomington, Lull, George F., M. D., Chicago.

Meyer, Karl A., M. D., Chicago, Moore, Josiah J., M. D., Chicago, Mundt, Henry G., M. D., Chicago, Newman, Louis B., M. E., M. D., Chicago, Niehoff, Miss Hattie, American Medical Association, Chicago, Norman, M., M. D., Chicago, Nugent, Oscar B., M. D., Chicago, Orndorff, John R., M. D., Chicago, Peterson, Carl M., M. D., Chicago, Portis, Sydney A., M. D., Chicago, Rattner, Herbert, M. D., Chicago, Rolnick, Harry C., M. D., Chicago, Rosenblum, Alfred H., M. D., Chicago.

Salk, Melvin R., M. D., Chicago, Schapiro, Mark M., M. D., Chicago, Schnaer, Ira L., M. D., Chicago, Sciarretta, Sylvio A., M. D., Chicago, Sheaff, Howard M., M. D., Oak Park, Smith, Austin, M. D., Chicago, Smith, James J., M. D., Dean, Medical School Loyola University, Chicago, Smoot, Katharine, M. D., Highland Park, Spaeth, R., M. D., Chicago, Spellberg, M. A., M. D., Chicago, Steffen, Curt, M. D., F.I.C.S., Rockford, Stevenson, Walter, M. D., Quincy, Strauss, Sidney, M. D., Chicago, Sweeney, Leo. P. A., M. D., Chicago, Thomas, Mr. Charles C., Charles C. Thomas, Publisher, Springfield.

Thompson, Willard Owen, M. D., Chicago, Thorek, Philip, M. D., Chicago, Tremaine, Myron J., M. D., Evanston, Turnbull, George C., M. D., Evanston, Udell, Sam C., M. D., Chicago, Vail, Derrick, M. D., Chicago, Volini, Italo F., M. D., Chicago, Weigel, Charles J., M. D., River Forest, Weld, E. H., M. D., Rockford Clinic, Rockford, Whelan, Miss Jewel F., American Medical Association, Chicago, Willems, J. Daniel, M. D., Chicago, Zekman, Theodore N., M. D., Chicago, Ziegler, Rudolph W., M. D., Polo.

PRIMARY TUBERCULOSIS

With the rapidly increasing number of persons reaching maturity without becoming infected with tubercle bacilli, a larger number of adults will be found on the general medical wards with progressive primary tuberculosis. These cases resemble quite closely lymphoma of the Hodgkin type, progressive coccidioidomycosis and histoplasmosis, and, to a lesser extent, leukemia, aplastic anemia, metastatic neoplasm and sarcoidosis.

Before the discovery of promizole and streptomycin, the diagnosis of progressive primary tuberculosis was of academic interest only, but now, with a reasonably early diagnosis, some of these patients can be cured.

Excerpt: Progressive Primary Tuberculosis in the Adult and Its Differentiation From Lymphoma. D., Durham, North Carolina, The New Englands and Mycotic Infections, David T. Smith, land Journal of Medicine, August 4, 1949.

MEDICAL ECONOMICS

The Medical Economics Committee. Chauncey C. Maher, Chmn., Hubert L. Allen, Emmet B. Bay, Edwin F. Baker, Carroll Birch, Thomas C. Browning, Roland R. Cross, James Graham, George Halperin, Edwin S. Hamilton, Ford K. Hick, Edwin F. Hirsch, May McDonald Milligan, Marie Wessels, Walter M. Whitaker, Holland Williamson.



Economic Problems in the Practice of Pathology

The demand for pathologists at present exceeds the supply. This is due largely to the increased use of clinical and anatomic laboratory examinations in diagnosis and treatment not paralleled by a proportionate increase in the number of pathologists. Another factor in the demand for pathologists by hospitals is the requirement for recognition by various medical organizations that the services of a pathologist be provided. The older pathologists have lived through the transition from a time when only a few of the large hospitals had a full-time pathologist to now when even small hospitals want a pathologist although the volume of work may not require his full time. This presents a phase of adjustment in an expanding field of medical practice which cooperative effort can solve.

The supply of pathologists to meet the demands depends upon 1) the number of graduates in medicine entering this field of specialization and 2) the opportunities for teaching clinical pathology and pathologic anatomy to this group of physicians. The latter element seems not to be a serious problem. In some university centers

where prospective applicants look for training, necropsies are conducted in a department separate from the one where surgical tissues are examined and neither of these departments deals with the clinical pathology.

The problem of meeting the greater demand for pathologists centers then on attracting a larger number of physicians into this field of specialization. The choice of specialization is individual and some of the elements in the practice of pathology deserve consideration. Potential candidates in pathology may think that this specialty in medical circles is subservient to the others, and in lay circles has little or no prestige. This comes from the work relations of the pathologist in medical practice. He never becomes a family physician nor does he develop a clientele of patients. Patients go to their physicians for the restoration of health, to have the assurance of physical well-being, or to be guided through the function of creating children. A patient may have some or no facts about the nature of the illness or disability which prompts him to seek medical care. Likewise, he may or

may not realize that his disorder presents to the doctor two problems 1) diagnosis and 2) treatment. Doctors know that specifically either or both of these can be difficult. But the patient may not realize this, his main objective being the restoration of his health and hence therapy. Pathologists, as specialists, do not offer therapy as a stock in trade, nor do patients as a group go to them for treatment. Herein rest some of the elements in the pathologist's struggle for appreciation of his position in the practice of medicine. Strictly speaking, the pathologist offers only diagnostic services and these in a large measure only through the patient's physician from whom the health-restoring treatment is sought.

Since pathologists are concerned chiefly with diagnosis, the choice of this specialty depends upon a candidate's interest and ability in biology, chemistry, and bacteriology, and how much in satisfaction and remuneration he can derive from the application of these disciplines in a medical practice. Some physicians wish to have more personal contact with the sick — the art of the practice of medicine — than is offered in the practice of pathology. The thought of working in a field where details and precision are important elements in attaining proficiency may deter a physician from becoming a pathologist. Another element which may influence contrarily can be the initial feeling of inadequacy aroused through the realization that many years of training and experience in a large volume of pathologic material are necessary in order to become a reliable diagnostician. Pathology, however, offers much in satisfied living in the daily routine and out of which many opportunities for creative work develop.

Some may ask what the pathologist actually does for the patient. Without the patient realizing their importance, the pathologist provides and controls all kinds of clinical laboratory tests, some of which actually determine the diagnosis; he provides the data for therapeutics whose value ranges from small to the essential; he offers skill in the examination of biopsy tissues where clinical diagnosis is difficult, and a practice that has increased greatly in volume; he offers tissue diagnosis service to fields of specialization, such as bronchoscopy and oncology whose practice could not function without it. The pathologist serves the patient indirectly in hos-

pital practice through necropsy examinations which improve the quality of medical practice by the staff, and which on occasion have significant value to the family, friends, or the community.

Among pathologists are some who seek work arrangements in hospital appointments similar to those obtaining in private and commercial laboratories, arguing with apparent logic that a hospital as an institution should not engage in the practice of medicine and that a pathologist who accepts a position on a salary basis becomes a proselyte to this form of medical practice. Most hospitals are chartered as non-profitable institutions, founded on the charitable principle of providing facilities for the care and treatment of the sick. They benefit from certain tax exemptions, gifts, and endowments, but at the same time like every other functioning organization must meet salary and operating expenses. Private laboratories operate on the principles of competitive business within ethical rules established by medical organizations and with the expectation of sizeable profits. For a hospital laboratory with its exemptions to compete with these organizations seems an unfair practice. This does not say that a good hospital laboratory should not help in developing good medical practice in a community, but it should recognize its advantageous position and the level where it becomes commercially competitive. Perhaps if the goal for operating hospital laboratories like a commercial enterprise is reduced to the prime factor, it becomes one of financial return to the pathologist. Doubtless hospitals have operated and still do operate laboratories with a large excess of income over expenditures and to which the pathologist points with accusation and demands that he is entitled to a large part of the excess. The laboratory is only a part of the entire institution and the surplus income is used to offset deficits in operating units that have expense but no or little independent income. The patient, after all, must pay for the total hospital income. The patient, after all, must pay for the total hospital cost. If the laboratory costs penalize unequally the patient load of the hospital then there should be a re-evaluation of costs and charges to accomplish a more equitable distribution. So, when the demand is made for operating a hospital laboratory like a commercial unit on the principle of not having the institution engage in the practice of

medicine, care must be taken that the objective is not concealed, namely how much more will accrue to the pathologist as well as the institution by this arrangement and at the expense of the patient. In these discussions returns in various other fields of specialization are introduced for comparison and with implied justification. But the patient has to pay the bill, and when each specialty spirals its wages beyond the means of many sick, arguments for socialized medicine gain. A marked improvement in the salary and appreciation of the pathologist has occurred in recent years. This is not to say that all is as it should be.

Another element in these discussions on the practice of medicine by hospitals in the field of pathology, as well as in radiology and anaesthesiology, is the resistance against an implied control of the practice of these specialties by lay directors. Boards of Trustees are concerned mainly with the financial and physical problems of the hospital through the medium of the Di-

rector, very often a lay person, but sometimes a physician. The Medical Staff, through its organization, presents its requirements to the Director. Some large hospitals have an Assistant Director who is a physician, hoping through a professional medium to promote better understanding and work relations with the Medical Staff. The lay control features in such a system ought not to be formidable. Whatever the inter lay-professional financial arrangements are, they should be clear and equitable in the mind of the patients. Hospitals are the work shop arranged for physicians to render service in the more complicated methods of diagnosis and treatment. Both pathologists and hospitals should strive to improve themselves and to adjust their differences on the basis of fairness.

Pathologists can do much to improve appreciation of their specialty in professional and lay circles through active participation in the local and national medical societies and by engaging in community activities.—E.F.H.

THE HYPOCHROMIC ANEMIAS

Recent studies in the field of the hypochromic anemias have been mainly concerned with fundamental observations regarding iron metabolism, rather than with clinical problems, but these investigations, often involving the use of radioactive iron, have been experimental proof of our general concepts of iron deficiency. Thus, the use of these tracer materials has proven conclusively that four to five times as much iron is absorbed in human beings when it is administered in the ferrous form as opposed to the ferric. The effect of achlorhydria in reducing absorption of iron from food, the depressing effect of alkalis

on iron absorption, and the unimportance of such materials as copper and molybdenum in clinical iron deficiency have been re-emphasized.

There is still no evidence that iron ever needs to be administered parenterally, and there is likewise no evidence that any combination of iron with liver, with vitamins, or with folic acid is of any advantage in the treatment of hypochromic anemia.

Excerpt, Recent Advances in Pernicious Anemia, The Hypochromic Anemias and The Hemolytic Anemias, John J. Boehrer, M.D., Minneapolis, Minnesota, Minnesota Medicine, September, 1949.

THE MAKING OF A DIAGNOSIS

An extensive and accurate knowledge of the natural history of disease is essential to diagnostic skill. This knowledge cannot be static but must be constantly expanded and revised in the light of newer scientific discoveries. Thus, if one is not informed as to the existence of toxoplasmosis, he is not likely to recognize it. If one is not aware that Rocky Mountain Spotted Fever is endemic in his district, he may not consider it in the differential diagnosis of an obscure infection. If a physician does not know that polycythemia or parathyroid tetany may cause tortuous, dilated retinal veins and choking of the optic discs, he may, on the basis of those ocular disturbances, diagnose a brain tumor and thus expose his patient to a needless and dangerous operation. . . . Ignorance however among those who have been exposed to adequate educational opportunities is probably not the chief cause of incorrect diagnosis. Much more frequently, errors are due to incompleteness or carelessness in the study of the patient. All of us have been trained to take a complete and systematic history and we all know that in an extraordinary number of cases the story affords one of the most important clues in the recognition of disease. . . . All of us have been trained to do thorough and searching physical examinations but haste, the pressure of other engagements, natural procrastination, often lead to superficiality and to omission of important details. . . . Another thing that causes great difficulties in diagnosis is slavery to the laboratory. To most of us there is a fascination in data which can be recorded in exact figures. . . . One is apt to forget that technicians, even good ones, are subject to human error, that many of the tests are complicated involving many steps, any one of which when faulty, may lead to gross error. Furthermore it is not always appreciated that the tests themselves are subject to certain fallacies and exceptions or that the interpretation assigned particularly to new tests may be quite erroneous. Too great dependence upon the laboratory, too ready and too uncritical acceptance of its results, is universally a frequent source of diagnostic errors.

Excerpt, The Making of a Diagnosis, David P. Barr, M.D., Physician-in-Chief, The New York Hospital; Professor of Medicine, Cornell

University Medical College, New York City, Boletin De La Asociacion Medica De Puerto Rico, May, 1949

SPEAKING OF CANCER

If I may become personal, let me say that you must not feel that because you're not looking through a microscope and because you're not trying to extract an etiocholenolone from the urine of a patient with cancer that you haven't got a contribution to make. We all have according to our ability. It may be great, it may be small, but it is there. When I think of that I am reminded always of what an old Quaker lady said when I went to college. She was a very old lady and she told us how when she was young her father had taken her into country which was then quite wild, into the Grand Canyon. They had gone farther than they knew and as they turned to come back their horses were dry and desperately in need of water. As they tried to indicate to the animals in what direction they thought water was, the horses refused to move but stood still pawing the ground. There beneath what appeared to be dry sand and rubble, eight inches down, they came on water. Her moral was that if we will look for the freshets of the spirit beneath the rubble of the routine of our daily lives, we'll find there things that are useful and which are intimations of great achievements.

Excerpt, Prospects in Cancer Control, Charles S. Cameron, M.D., New York, N. Y., The Journal of the Kansas Medical Society, August, 1949.

A person with tuberculosis has many needs and before we can meet them we must understand them fully. Medical treatment is, of course, the obvious essential. But also to be considered are many factors which have a bearing upon the way a patient responds to his particular therapy. What are these factors? What facilities do our communities have to deal with them? Most patients face a variety of psychological, financial, and personal adjustments which cannot be separated from one another. Emotional reactions to the disease itself influence the acceptance of the diagnosis and treatment. Robert J. Anderson, M.D., Pub. Health Rep., June 3, 1949.

Tuberculosis mortality in the U. S. Zone of Germany began to rise promptly at the beginning of World War II, reached a peak in 1945 and has progressively declined in 1946 and 1947. The extent of the rise was only moderate as compared with that in several other European nations. Philip Sartwell, M.D., Charles H. Mosely, M.D. and Esmond R. Long, M.D., Am. Rev. Tuberc., May, 1949.

STATE DEPARTMENT OF PUBLIC HEALTH



Organized Community Effort

**Roland R. Cross, M.D.,
Springfield**

This is a most opportune time to hold a series of meetings on public health. It is for the farmer the time of the harvest, the time when he can add up his achievements in some very well defined terms. It is also the time when his ideas for next year's work begin to stir in his mind. It is the season when he lines out his program for crop rotation and his scheme of fertilization, and selects the kind of seeds he expects to plant now and in the spring.

For us in the cultivation of public health, these fall conferences likewise provide an opportunity to see what we've accomplished and to plan for the time to come. Whether our plans meet with success or failure — whether we get a sparse crop of physical well being or whether we attain the utmost in community and personal health depends in large part on how we plan and on how much we are willing to put into the plan.

Since the 1948 conferences of the Statewide Public Health Committee, our yield of progress has been abundant. In November, two additional counties — Jo Daviess and Jackson — elected to establish county health departments; this action brings the total of counties so provided for to 24. These 24 counties with the legal framework for local health services encompass 66 per cent of the population of the State and 24 per cent of the land area. The necessary qualified personnel have become more generally available and the work in basic environmental sanitation, preventive medicine and dentistry and public health nursing services is going forward in a commendable manner.

The County Health Department Law — the Searcy-Clabaugh Law — was amended by the 66th General Assembly in order to bring the legalities in conformity with the needs of the people. These amendments, all essentially favorable to the purpose of this Committee, were

Presented at the 7th Annual Conference of Illinois Statewide Public Health Committee, Waukegan, Sept. 9, 1949.

brought about largely through the efforts of the members of the Statewide Public Health Committee. Despite the opposition which was anticipated on the "May — Shall" issue, the statute was amended to read that upon presentation of a petition in good order, the supervisors of the county *shall* instruct the clerk of the county court to put the proposition on the ballot at the next general election. The amendments did, however, include a compromise on the subject of the referenda — by specifying that the proposition for the establishment of a County Health Department (or a Multiple County Health Department) may not be presented more frequently than once in four years. Other amendments to this statute were in the nature of clarifications of the language and additional clauses to facilitate the fiscal operation of multiple county health departments.

We got a good crop of other important public health legislation from the 66th General Assembly.

There are two important new laws relating to control of tuberculosis. One provides \$6,000,000 for grants in aid to local tuberculosis authorities for care of patients in tuberculosis sanatoria. These grants are subsidies per patient days of care available to these counties which have made a substantial local effort to conquer their tuberculosis problem. The statute requires that this local effort be the levy of a .05 per cent tax for tuberculosis. The second significant piece of legislation on tuberculosis control is an appropriation of \$1,000,000 for alteration, rehabilitation, equipment and expansion of existing public tuberculosis hospitals.

The Legislature passed an act for the creation of Hospital Districts, replacing thereby the important law enacted by the 65th General assembly but declared invalid by the Supreme Court. The new law was drafted by the Legislative Reference Bureau to circumvent the unconstitutional provisions of the old. The widespread popular interest in this law, vital to the hospital construction program, was demonstrated by the technical assistance given by numerous practicing attorneys throughout the State.

The General Assembly amended the Marriage Act by deleting any reference to the microscopic test for gonorrhea as a prerequisite to the attainment of a marriage license. This test had become outmoded but had to be performed as long

as the statute spelled out the detail. This amendment to the marriages act I regard as a very important piece of public health legislation.

The Grade A milk law and the milk pasteurization law were brought up to date, important laws were passed on the subject of stream pollution and the definition of the powers and duties of the State Department of Public Health. An appropriation of \$3,000,000 was made for grants in aid for hospital construction and \$1,625,000 was appropriated to the State Department of Public Health for grants to local governments for local public health services.

In addition to these gains from the efforts of the lawmakers, Public Health in Illinois has many activities in the nature of hardy perennials which this year have continued to flourish.

Twenty-four tumor diagnostic clinics distributed evenly throughout the State are now available to assist in cancer control. Fourteen new hospital units, aided by the Department's hospital construction program are developing in scattered needy areas. The venereal disease control program, fortified by refinements in therapy with the newer drugs, is producing a satisfying impact on the problem. In Public Health Dentistry, the several teams of personnel are bringing the protection of sodium fluoride to thousands of children in Illinois and through their demonstrations are acquainting local dentists with the assembly line procedures which must be followed if any portion of our children are to receive this prophylactic treatment. The Department's laboratories are out in front with their volume and quality of service in bacteriological serological and viral diagnosis. The Premature Infant Center Program, the mobile tuberculosis x-ray units, the milk sanitation and other sanitation and the public health veterinary programs are reaching the lives and interests of a growing public. All of these fine products and our public health education program are in the blue ribbon class.

On the Federal front, the usual appropriations for general health, venereal disease, tuberculosis, cancer, industrial hygiene, public health dentistry, maternal and child health, mental health, and hospital construction were made. In addition, Federal grants to the States for heart disease control became available for the first time. The Congress is still considering a Bill for doubling the grant for hospital construction

(under the Hill-Burton Bill) and is debating the School Health Services Bill and the Bill providing for appropriations for local health units.

This latter Bill has substantial support and I know of no opposition. As you may know, the Senate passed the Bill without dissenting vote on August 27. There is general agreement and forceful testimony to the effect that local health units in order to have the \$1.50 per capita required to conduct the basic public health services must have financial resources beyond the real estate tax. This is particularly apparent in the more rural regions of the United States and likewise of Illinois.

On the international front, the harvest too is promising. The World Health Organization has begun operations and the seed sown generations ago by advocates of world-wide control of preventable disease has at last come into its first bloom. This is yet a tender plant that must weather the wind and rain of economic and political forces. Medically, the creation of the World Health Organization is a great step toward the common good. Two years ago, this young organization provided the vaccine and the know-how which controlled the great epidemic of cholera in Egypt. Now these experts of W.H.O. are launching a tremendous program against tuberculosis, world-wide sanitary measures, an extensive maternal and child health program and substantial programs for improved nutrition and for the control of malaria. If we can stamp out plague, cholera, dysentery, nests of tuberculosis, and malaria when they are yet on foreign soil, we are not only helping those in immediate danger, but ourselves as well. The world community today is no larger, relatively speaking, than the Northwest Territory of a century ago and those who are familiar with the history of that era know of the fearful way in which great epidemics followed the migrations of the people. Today thousands of Americans are migrating in foreign lands and our country is host to many strangers and to much cargo, both of which are, among other more favorable things, excellent potential transmitters of disease.

With the splendid yield of fruitful trends in public health — what of the plans for the future?

Certainly we will continue to cultivate with renewed vigor all the time-honored services; for

the ills which they were designed to correct continue with us as the ever present crop of weeds remain a challenge to the farmer. And just as in the case of weeds which spread from nearby untended areas, many diseases which affect man have their origin far afield from the human population. Some of our most important problems in communicable disease involve similar diseases in domestic and wild animals. Man cannot conquer the problem of human rabies unless he conquers this disease in dogs and wild animals, man cannot gain the upper hand with undulant fever unless he obtains control of brucellosis in cattle, hogs and goats. Because both rabies and brucellosis are common in Illinois animals, these diseases pose major problems of communicable disease control. Sylvatic plague is a naturally occurring disease of rodents and is an ever present threat to man. Many of the virus diseases have animal hosts as well as human hosts. Tuberculosis in cattle is not stamped out and if the bars of vigilance are lowered, it can regain its former position as a major source of illness.

In addition to maintaining the established services, we expect to expand the newly founded Mental Health Program and to add new activities such as heart disease control programs and other programs to improve the situation with regard to chronic and degenerative diseases. Next year and in the years to come we expect to take advantage of a nice windfall which has come to the Department in the nature of an offer by the W. K. Kellogg Foundation of Battle Creek, Michigan, to assist in the extension of diagnostic laboratory and x-ray services in small rural hospitals.

The major objective in Public Health which involves most directly all of you as community leaders, is to attain complete coverage of all the population with local health departments on a county and multiple county basis. The creation of these local health units will provide the mechanism for public health services in each local area. The basic services — Vital Statistics and Records, Laboratories, Public Health Education, Maternal and Child Health, Communicable Disease Control and Sanitary Engineering — have been clearly defined by precedent. These services are essential public functions in any modern community worthy of the name. And, on the framework of these basic services and the ad-

ministrative organization which co-exists, the special public health programs can be superimposed. We have had a long and commendable experience in this country with special public health programs, largely under voluntary auspices. The Congress, during recent years has made appropriations for several distinct special categories of human ailments and has currently before it many bills on additional special health problems. Unless there are local units to carry on the necessary health work, the efforts of the Congress and the efforts of the executives of the National voluntary health programs cannot meet with fruition.

This fall we do not expect any gains in the number of local health departments; for the issue of whether or not a community shall establish a county health department is a matter for referendum at a general election. The next

general election is in November 1950. We have, therefore, a year in which to break the sod, till and tend the ideas for organized community action for hygiene and public health. We have this time to deliberate on the merits of the crop and to sow the seed before the harvest time of another ballot.

In the discussions which are to follow, I am sure you will find many stimulating thoughts. I hope that you will not be reticent to enter into the discussions and that you will put your questions squarely before the staff and each other. I expect that through this cross fertilization of the ideas of people with varied training, experience and civic responsibility, there will emerge a deeper realization of the meaning of public health units and a yet stronger desire to plant them wisely throughout Illinois.

THE USE AND ABUSE OF SPINAL PUNCTURE

At this point it should be stated that lumbar puncture is indicated in the diagnostic work-up of all patients with diseases of the nervous system, except those suspected of harboring a space-occupying lesion. Generally speaking, lumbar puncture has no place in the diagnosis of brain tumor, or any other mass lesion of the cranial cavity. In such cases spinal puncture contributes nothing but the risk of sudden death due to herniation of the temporal lobe through the tentorial incisura or to herniation of the cerebellar tonsils through the foramen magnum. This is far from a theoretical risk, and all neurosurgeons have had the experience of being called in at the last moment to see a patient who suddenly became comatose after an injudicious spinal puncture had been performed. Where there is the possibility of an intracranial tumor, abscess, or hematoma, the indication is

for neurosurgical intervention at the earliest moment; and any further diagnostic procedures are best left to the neurosurgeon.

There is no complete agreement among neurosurgeons as to the indications for spinal puncture in cases of craniocerebral trauma. It does, however seem certain that neurosurgeons perform considerably fewer lumbar punctures in such cases than do other physicians. The reason is simply that the proper management of head injuries bears no relationship to the cerebrospinal fluid findings, but is almost entirely dependent on the clinical evaluation and judgment of the attending neurosurgeon or neurologist. In cases of acute head trauma the pressure of the spinal fluid may be high, low, or normal; and the fluid itself may be bloody or clear.

Excerpt, The Use and Abuse of Spinal Puncture and Cerebrospinal Fluid Studies, Alexander C. Johnson, M.D., Great Falls, Montana, Rocky Mountain Medical Journal, September, 1949.

CORRESPONDENCE



"YOUR MENTAL HOSPITALS" THE NEW RESEARCH HOSPITAL

A unique mental research hospital is being developed at Galesburg, Illinois. The former Mayo General Hospital of the United States Army, which later served as the Galesburg branch of the University of Illinois, was acquired by the Illinois Department of Public Welfare on September 1, 1949. This facility is a typical semi-permanent army hospital, with enclosed corridors connecting the various buildings and wards. The Legislators and the Governor appropriated three million dollars for this hospital for the current biennium (1949-1950). Rehabilitation will be necessary to convert this into a hospital for the care and treatment and study of mental patients.

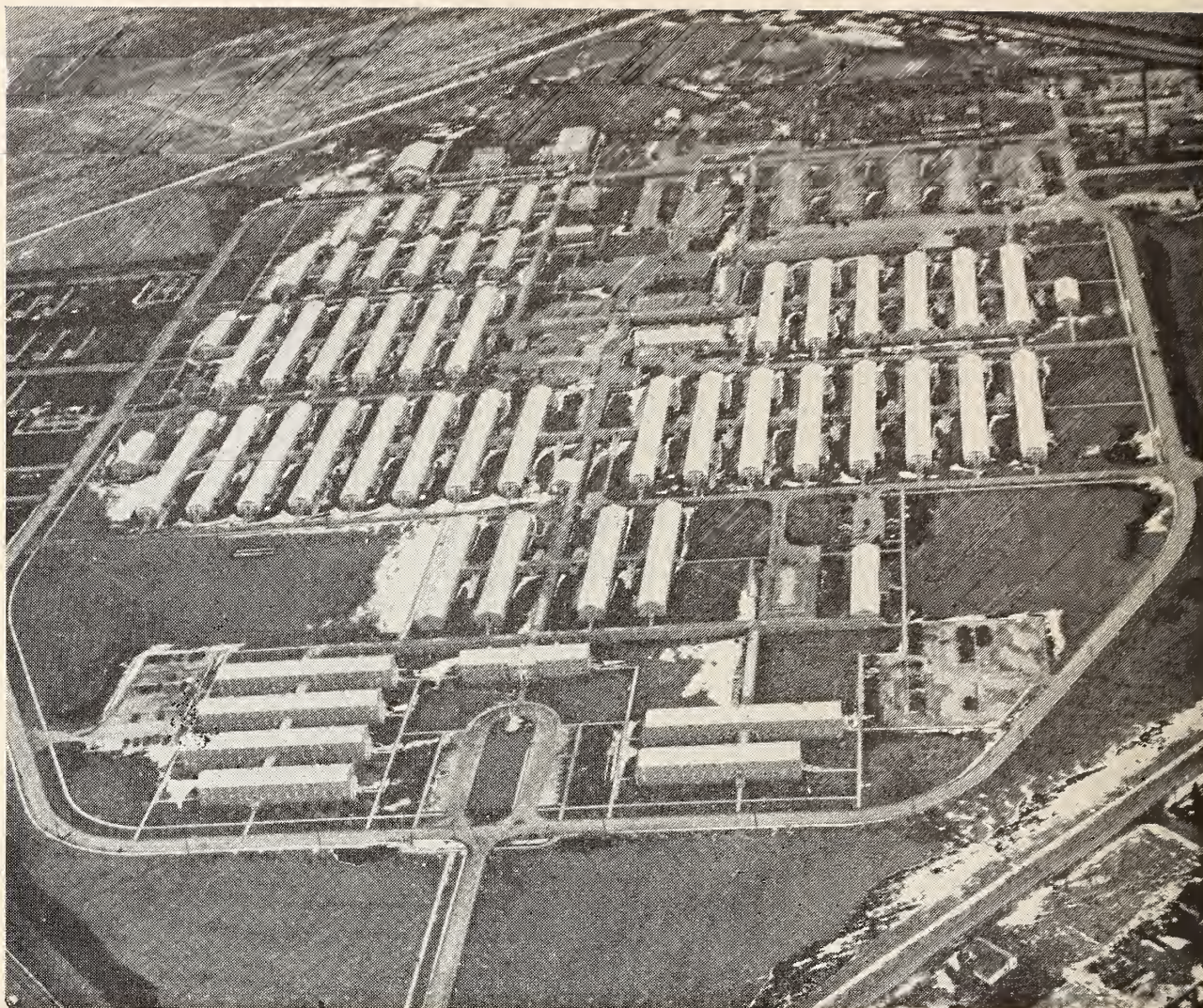
The institution will be known as the Galesburg State Research Hospital, with an eventual capacity of 2000 patients. Special emphasis will be placed on geriatric research. (1500 out of the 2000 patients) This will deal not only with psychiatric and neurological research in the psychoses with arteriosclerosis and senile dementia, but with all phases of disease processes of the aged and aging. The large chemistry laboratories used by the University of Illinois will be converted into research laboratories. Facilities for pathology and animal study are available. In addition to the qualified medical staff, headed by a medical superintendent and clinical director,

there will be a research staff supervised by a research director. The occupational and recreational therapists plan a very active and stimulating program. Some interesting experiences have been noted with the utilization of swimming pools in the aged groups. The excellent swimming pool at the institution will be utilized for this purpose.

Over one-third of the first admissions to the nine mental hospitals last year were over 60 years of age, and over one-third of the thirty-four thousand patients in these hospitals are over 60 years of age. Thus, there is a definite need for specialized study. With the lengthening of the span of life there is an ever increasing number of persons coming into this age group. These studies should be beneficial to the care of the aged regardless whether they are hospitalized or not.

In addition to research work in the field of geriatrics, studies will be conducted for the care, research and treatment of alcoholics and juvenile psychoses (patients up to age of 16). It is hoped that the five Class A Medical Schools in Illinois will collaborate with the Department of Public Welfare in the research projects.

Admissions to this institution will be restricted to mentally ill. There will be no direct admissions, the patients will be selected and transferred from the nine other mental hospitals.



The Galesburg State Research Hospital for the mentally ill.

Thus, Illinois will have a new mental hospital, a research hospital, and a geriatric hospital. There is no similar setup in the country. By the combined efforts of the medical profession and the allied fields, an outstanding job should be accomplished.

G. A. Wiltrakis, M.D.,
Deputy Director
Medical and Surgical Service

CLINICS FOR CRIPPLED CHILDREN LISTED FOR DECEMBER

Doctor Herbert R. Kobes, director of the University of Illinois Division of Services for Crippled Children, has released the December schedule of clinics for physically handicapped children. The Division will conduct 10 general clinics providing diagnostic orthopedic, pedi-

atric, speech and hearing examinations along with medical social and nursing services. There will be 4 special clinics for children with rheumatic fever and 2 for cerebral palsied children.

During August and September 1,345 children and 17 adults were examined at the general clinics, 96 at the rheumatic fever clinics and cerebral palsy clinics is by invitation only.

Local medical and health organizations, both public and private, cooperate with the Division in providing this clinic service to Illinois' thousands of physically handicapped children. The examining clinicians are selected from private physicians who are certified Board members. Any private physician may prefer to bring to a convenient clinic those children for whom he may want examinations or may want to receive consultative services.

The December Clinics are:

December 1 - Hinsdale, Hinsdale Sanitarium
December 6 - E. St. Louis, Christian Welfare Hospital

December 7 - Chicago Heights, St. James Hospital

December 7 - Rock Island (Cerebral Palsy), St. Anthony's Hospital

December 8 - Elmhurst (Rheumatic Fever), Elmhurst Community Hospital

December 8 - Macomb, St. Francis Hospital

December 8 - Springfield, Memorial Hospital

December 9 - Chicago Heights (Rheumatic Fever), St. James Hospital

December 13 - Peoria, St. Francis Hospital

December 14 - Aurora, Copley Hospital

December 15 - Rockford, St. Anthony's Hospital

December 16 - Chicago Heights (Rheumatic Fever), St. James Hospital

December 20 - Peoria, St. Francis Hospital

December 20 - Effingham (Rheumatic Fever), St. Anthony's Hospital

December 21 - Springfield (Cerebral Palsy), St. John's Hospital

December 22 - Normal, Brokaw Hospital

Children accepted for Division care are those with:

1. Orthopedic conditions including acute poliomyelitis
2. Rheumatic fever and heart disease
3. Conditions of the nervous system
4. Cerebral palsy
5. Congenital and acquired defects which respond to plastic surgery
6. Speech defects associated with organic conditions
7. Hearing loss and deafness
8. Epilepsy

NATIONAL TUBERCULOSIS ASS'N. TO MEET IN WASHINGTON

The 46th Annual Meeting of the National Tuberculosis Association will be held April 24-28, 1950, at the Hotel Statler, Washington, D. C. The National Tuberculosis Association is a non-official organization which since 1904 has been waging war against tuberculosis in the United States. Today it has 3,000 affiliated state and local associations engaged in a nationwide fight against the disease.

Meeting concurrently with the NTA will be its Medical Section, the American Trudeau Society, and the National Conference of Tuberculosis Secretaries, an organization of public health workers.

Further information may be obtained by writing the National Tuberculosis Association, 1790 Broadway, New York 19, N. Y.

AN INVITATION TO LOUISVILLE MEETING

A two-day Sectional Meeting of the American College of Surgeons is to be held at the Brown Hotel, Louisville, Kentucky, on February 20 and 21. This meeting will consist of all day and evening conferences on timely surgical subjects and separate meetings for hospital personnel where hospital problems will be considered at panels and round table discussions.

The surgical program will include some new surgical motion picture films, papers and panels on such subjects as: Arterial Lesions of the Extremities, Hormone Therapy in Breast Lesions, Intestinal Obstruction, Gastric and Intestinal Intubation, Treatment of Head Injuries, Surgery of the Hand, Surgical Lesions of the Stomach, Caesarean Section, Management of Uterine Prolapse, the Management of Traumatic Conditions and a Symposium on Cancer.

Members of the Illinois State Medical Association and personnel of Illinois Hospitals are invited to attend this meeting. The fellows of the College in Louisville wish to assure all visitors that adequate hotel accommodations will be available and that they will be most welcome at all of the sessions.

OBSTETRICIANS CERTIFY 236

The annual meeting of the American Board of Obstetrics and Gynecology was held in Chicago, Illinois, from May 8 to 14, 1949, at which time 236 candidates were certified.

New bulletins, incorporating changes made at the recent meeting, are now available for distribution upon application and give details of all new regulations.

The next scheduled examination (Part I), written examination and review of case histories, for all candidates will be held in various cities

of the United States and Canada on Friday, February 3, 1950. Application may be made until November 5, 1949. Application forms and Bulletins are sent upon request made to American Board of Obstetrics & Gynecology, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

DOCTORS NEEDED IN JAPAN

To the Editor:—

The Department of the Army is urgently in need of Medical Officers to serve in a civilian capacity with the occupation forces in Japan. These positions, which involve the performance of the various duties of a general practitioner on an Army Hospital Staff, offer an excellent opportunity for broad experience. We will greatly appreciate your assistance in locating qualified and interested candidates for this program.

Minimum acceptable qualification requirements are a degree in medicine plus five years of progressive professional experience which in-

cludes one year of rotating internship in an accredited hospital. Service on active duty with Army, Navy, or Veteran's Administration may be substituted for the required internship.

The salary for these positions is \$6235.20 per year plus 10% post differential with quarters provided at no cost to the employee. Individuals selected for appointment must agree to remain a minimum of two years. Transportation is furnished to and from Japan. Dependents may join the employee in approximately eight to ten months after his arrival in the command.

It will be appreciated if you will publicize this information and advise interested applicants to make formal application by submitting Civil Service Commission Standard Form 57 to this office. Forms may be obtained from any Class A Post Office. The necessity for immediate recruitment of qualified and suitable personnel cannot be over emphasized.

John H. Plattenburg
Representative
Overseas Affairs Branch

ARMY COMMISSIONS 169 CIVILIAN MEDICAL INTERNS

Commissions as first lieutenants in the Army Medical Corps Reserve, have been given to 169 medical graduates who have been accepted for internship training in approved civilian hospitals, it was announced today by Major General R. W. Bliss, the Surgeon General. They have been sworn in and called to active duty, with full pay and allowances of their grade, and will remain in the civilian hospitals for the completion of their internship.

With this group the Army Medical Department inaugurates the second year of civilian intern training under its Graduate Professional Training Program. Additional rosters of selected candidates will be announced from time to time.

Under the provisions of the Civilian Intern Training Program, a medical school graduate who has been accepted by a civilian hospital approved by the Council on Hospitals and Medical Education of the American

Medical Association may apply for a commission as first lieutenant in the Medical Corps Reserve. If accepted, he is called to duty and assigned in a training status at the civilian hospital of his choice. On completion of his internship, he serves two years for each year of training he has received as a Reserve officer.

Another phase of the Graduate Professional Training Program is Military Intern training, in which selected medical graduates complete their internship in one of 10 Army general hospitals approved for medical teaching.

Applications for either phase are invited from prospective graduates who will not be less than 21 nor more than 32 years old on the date their internship will begin, who are citizens of the United States with high moral character, and who meet the physical requirements for a commission in the Regular Army.

Detailed information can be received from any Army recruiting office, or by writing: The Chief, Personnel Division, Office of the Surgeon General, Department of the Army, Washington 25, D. C.

ORIGINAL ARTICLES



Retrolental Fibroplasia

Ralph O. Rychener, M.D., F.A.C.S.
Memphis, Tennessee

As the progress of American medicine has extended the life span of the human race far beyond the average of several generations ago, the incidence of the degenerative disease of the eye and all other special organs has risen sharply. So much so that a specialty, called geriatrics, has come into vogue designed to treat the distressing miseries of old people, for in the period from 1900 to 1948, the life expectancy of man in this country has risen from forty-nine to sixty-seven years of age.

Similarly the meticulous and conscientious care expressed by American obstetricians and pediatricians in the call of duty to save and nurture almost non-existing life has rolled back the span of life at its very beginning resulting in preservation of numerous babies at eight and seven

months' gestation and even many in the six months' period. Undoubtedly many of these are subnormal organisms and early miscarriage may be Nature's way of determining the ancient law of survival of the fittest. Are we perhaps exceeding the limits to which we obligated ourselves by fealty to the oath of Hippocrates? The time apparently has come when we should recognize the hazardous future of very premature infants and understand fully the misery and suffering to which an increasing proportion of parents and children must be subjected. One of these diseases peculiar to extreme prematures is retrolental fibroplasia which dooms the individual to blindness and frequently to cerebral dysplasia and places upon the parents a mental burden of almost insufferable degree and upon society the necessity of support for an existence which can never be more than vegetative.

To Terry in 1942 goes the credit for describing a disease in premature infants in which an

Presented before the General Assembly, 109th Annual Meeting of the Illinois State Medical Society, Chicago, May 17, 1949.

opaque membranous tissue formed behind the lens, almost always involving both eyes but in varying degrees and by obscuration of the retina or by retinal detachment secondary glaucoma causing eventual and permanent loss of vision. It was the author's pleasure to hear Ted Terry's original presentation before the American Ophthalmological Society but like many others he was not greatly impressed, believing that a scientist interested in pathology had allowed himself to wax unduly enthusiastic over an interesting ocular specimen. It is an added pleasure here to record an apology for such thought to a fine observer, expert clinician and firm friend, for Terry proceeded to investigate every case of premature birth available for his inspection and in the years prior to his death published seven articles on the subject and was able to record its incidence in twelve per cent of infants weighing three pounds or less at birth.

In the typical case, an opaque, vascularized membrane lies against the posterior surface of the lens, which Terry first interpreted as the remains of a persistent tunica vasculosa. However Reese and Payne, Owens and Owens, and others including the author have seen the membranes develop under observation and recent investigation seems to indicate that they arise from the retina behind the ciliary body, are present before delivery and tend to increase in size in post-natal eyes. The globe is frequently smaller than normal with shallow anterior chamber and posterior synechia. Elongated ciliary processes, like coarse teeth of a comb, are visible behind the iris in the extreme periphery of the dilated pupil. The retrolental membrane may be complete or incomplete, and partial or total detachment of the retina may be present. Where the retina is visible and undetached there is frequently a pigmentary degenerative change observed in the retina or an increased vascularity which in Reese's case was found to be a hemangiomatous tissue on the surface of the retina. Krause found a relationship between these eye findings and abnormal development of the cerebrum so that he called the syndrome "congenital encephalo-ophthalmic dysplasia."

Owens and Owens made a careful study of all the premature infants born at Johns Hopkins Hospital between 1945 and 1947 with the following interesting figures with regard to incidence. 214 children were studied and the conclusion was

reached that the condition under discussion was not related to persistent hyaloid membrane or persistent tunica vasculosa. In the group whose birthweights were from 1360 to 2000 gms. (3 to 4-1/2 lbs.) the incidence of retrolental fibroplasia was 1.3 per cent. However, in those infants weighing less than 1360 gms. (3 lbs.) at birth the incidence was 112.1 per cent, exactly the proportions observed in Terry's series.

Clinical observations of retrolental fibroplasia have clarified the nature and origin of the lesion but have added nothing as to the cause of the disease. Owens speculates on the possibility of the induction of a metabolic imbalance by the high protein and vitamin diets, blood and plasma transfusions, parenteral amino acids and occasional hormone therapy given by zealous pediatricians in an effort to reduce infant mortality. He further mentions the observations of Hess, Mohr, and Bartelme who found an increase in hemangiomas of the skin in premature children, especially those under 2000 gms., and Reese's observation of a hemangiomatous tissue on the retina in one case of retrolental fibroplasia.

Kinsey and Zacharias have made an extensive study of the incidence of this disease in different locations and a correlation of the incidence with treatment given the infants. They conclude that there has been a distinct rise in incidence since 1942 and found that the increased survival rate is small compared with the apparent increase in incidence of retrolental fibroplasia. 372 infants were fully studied for the factors of: parity, age of mother, Rh type, type of delivery, analgesia administered, anaesthetic administered, cause of prematurity, single or multiple births, sex of infant, presence of congenital anomalies, general information and miscellaneous. In only two of these groups did there seem to be any significant relationship to the incidence of retrolental fibroplasia. The incidence of this disease in primiparous women was 9.5 per cent compared to 19.7 per cent in those of multiparous women. And the infants in whom retrolental fibroplasia developed remained in the nursery, water jacket incubator, and in oxygen from seven to ten days longer than those infants in whom the disease did not develop.

Treatment with radium, x-ray, diathermy and surgery has been entirely without avail. Operations for control of the secondary glaucoma which

often accompanies the condition are ineffective. Dissection of the membrane, removal of the lens and section of the membrane, incision of the ciliary body and withdrawal of the membrane are all measures which have been tried, resulting only in further degeneration of the globe. One is helpless in the matter of ocular treatment. Formerly a number of these eyes were enucleated under the erroneous diagnosis of retinoblastoma. It seems strange that the correct pathologic diagnosis was not made until Terry did so in 1942.

Fortunately, the author has had to cope with only two cases recognized as retrolental fibroplasia, both seen two years ago. The first, aged 10 months, of normal gestation, was already in the stage of secondary glaucoma with tension O. U. 56, Schiotz. Almost complete retrolental vascularized membranes were present through which fleeting glimpses of the fundi revealed pale optic discs. Vision was limited to questionable light perception and corneoscleral trephine was performed with temporary effect for six months. By this time the membranes were complete. It was interesting to observe in this patient the side to side motion of the head, described as elephantine, and said to be characteristic of this disease.

The second was a 6 months old girl, born prematurely at 6-1/2 months and weighing two pounds, with the disease well established but with normal intraocular pressure. Through the retrolental membranes extensive evidence of pigimentary retinal degeneration was seen. Light perception was questionable. A colleague had already advised surgery in the form of removal of the lenses and avulsion of the membranes. Because of the evident retinal disease and the almost certain shrinkage of the globe following such treatment, this advice was not supported but unfortunately nothing else of value could be suggested. A week later, the infant was operated upon by an ophthalmic surgeon from a large eastern clinic, who was visiting his home in Mississippi, and died from the anaesthetic just after the ciliary body had been incised in an effort to remove the lens and membrane. Apparently there was an accompanying cerebral dysplasia which made the infant a poor operative risk and should certainly have reduced it to imbecility had it survived. The grandmother had noted for the last two months the peculiar rocking motion of the head significant of cerebral dysplasia.

Undoubtedly for everyone save the surgeon, the ending of this particular case report is the most satisfactory that might be hoped for under the circumstances. How much suffering of mind and body and what medical expense might have been avoided had the zealous efforts of the pediatrician been unrewarded in this case.

Warkany has shown that a disease resembling retrolental fibroplasia in many respects could be produced in young rats born of mothers who were deficient in vitamin A. Perhaps it is in the field of the vitamin deficiencies that the real cause of this disease will be uncovered. Certainly it would seem worth while to conduct animal experiments on prematures to determine the effect of feeding with water miscible and oily solutions of vitamins A and D in varying amounts, as well as those of other vitamins whose real values are not so well known. Regional incidence may uncover some water factors of importance and breast feeding without bottle feeding may yield a clue.

In addition we should profit by the experience of Gregg, who by careful history taking discovered the correlation of congenital cataract with the incidence of German measles in the mother during the early months of gestation.

Every premature infant in our hospital centers should have immediate and repeated thorough ophthalmic examinations with the pupils dilated, for such examinations are exceedingly difficult under the best of circumstances. When the disease is discovered, painstaking investigation of every possible factor of which physician, pediatrician, and ophthalmologist can think should be covered and recorded. The gestation period should likewise be carefully considered for some factor of infection or vitamin deficiency in the mother. This mass of material correlated with animal experiments may yield some evidence which may aid in lowering the incidence of this dreadful disease. Prevention is the only hope for its eradication.

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Treatment of Common Colds With an Antihistaminic Drug

John M. Brewster

Captain, Medical Corps, U. S. Navy

The effect of antihistaminic drugs in the treatment of the common cold in its initial stage has been reported in previous papers^{1,2}. In those studies it was noted that all varieties of antihistaminic drugs used had a sedative effect as a side action in an appreciable percentage of patients which, when pronounced, somewhat limited their range of usefulness. Other investigators³ had reported that 2-methyl-9-phenyl-2, 3, 4, 9-tetrahydro-1-pyridindene hydrogen tartrate (phenindamine*) differed radically from all other antihistaminic drugs both in chemical structure and clinical effect and specifically that it was definitely stimulating in a large percentage of patients. Since, in the opinion of the author, the antihistaminic drugs are most useful in the treatment of colds when used in prophylaxis or in the initial stage of a cold to combat the allergic reaction that he believes initiates a cold, the drug's reputation promised superior results when used in the therapy of ambulatory patients.

A placebo was obtained identical in appearance with the tablet containing the antihistaminic. A reputation for success in treatment is essential when one is dependent upon volunteers for clinical material. Consequently, it was decided to issue placebos to 20 per cent of cases only. To effect this, all medication was issued in sealed standard

Navy Medical Department dispensing envelopes. One end margin of 20 per cent of these was stained brilliantly in each of four colors: red, orange, green and blue, and 20 per cent were left untinted. Each envelope contained 3 pills. In 4 out of 5 envelopes each tablet contained 25 mg. of phenindamine. The fifth contained placebo pills composed of lactose coated with cane sugar, dyed yellow. After filling and sealing, the envelopes were picked up in exact rotation and placed in dispensers, from which they were extracted one at a time from the bottom of the stack and thus in established rotation. To avoid any possibility of confusion, the author kept all medication in his safe and invariably inserted the placebo medication in its envelopes. Assistance in filling the other envelopes was used at times but the color containing the placebo was changed often enough to prevent its identification as such.

When all was in readiness, an announcement of the study was published at the Hospital and the Naval Air Station which employed over 5,000 civilians in its overhaul and maintenance activities in addition to and over and above the attached service personnel. The treatment was offered to all hands; service personnel, their families and civilian employees, the latter when actually at work on the station only. They were urged to report to one of four conveniently located treatment stations as soon as possible after the onset of a cold. The personnel of the treat-

*Editor's Note: Made by Hoffman-LaRoche, Nutley, N. J., and marketed as Thephorin-Roche.

TABLE 1
RESULTS OF TREATMENT WITH
PHENINDAMINE USING THREE
25 MG. DOSES AT FOUR
HOUR INTERVALS

Duration of Symptoms in Hours	Cases Cured Within 24 Hours	% Improved	% Failures	% Total
6 hrs.	247	54	25	99
12 hrs. or less	322	46	29	171
48 hrs. or less	419	41	34	251

TABLE 2
RESULTS OF TREATMENT WITH
PLACEBO PRESCRIBED IN
EXACTLY SAME MANNER
AS PHENINDAMINE

Duration of Symptoms in Hours	Cases Cured Within 24 Hours	% Improved	% Failures	% Total
6 hrs.	33	32	22	49
12 hrs. or less	39	28	35	66
48 hrs. or less	50	26	57	88

ment stations were instructed to obtain and record in log books the following information on each patient: name; rate (or status); age; duty station; history of allergy (asthma, hay fever, urticaria); symptoms; duration in hours; signs; temperature, and color of envelope issued. An examination of the eyes, nose and throat was made and when no evidence, including fever, of other disease was found, medication was issued. Patients were instructed to take one pill immediately and to repeat this dose every 4 hours with the remaining pills. They were informed of the possible side effects and were requested to report in person or by telephone the next morning the results of treatment including side effects. The series covered the period from 15 December 1948 to 12 April 1949.

Results: Altogether 2,220 attacks of the common cold were treated with 14% occurring in women; the remainder in men. In 1,806 or 78% of the attacks the patient received the drug and in 414 or 22% they received a placebo. Of those receiving the drug, 417, and of those receiving the placebo, 121, were eliminated for failure by our personnel to record color of envelope or other essential data and includes cases

TABLE 3
SIDE EFFECTS REPORTED BY PATIENTS
TAKING PHENINDAMINE

Side Effect	No. of Cases As a Primary Complaint	No. of Cases As a Secondary Complaint
Drowsiness	154	9
Dizziness	84	11
Insomnia	80	10
Nervousness, Jittery	40	12
Headache	35	4
Nausea	16	2
Weakness	14	1
Unusual sweating	13	1
Chills	11	3
Urticaria	7	2
Fatigue	6	2
Heartburn	4	1
Tachycardia	3	2
Euphoria	2	
Epistaxis	2	
Fever	2	
Listless	2	
Increased Urinary Frequency	2	

One each of the following: "wild feeling," mentally depressed, nightmare, diarrhea, "unreal feeling," "stomachache."

where obviously the wrong diagnosis had been made. No case was included for statistical purposes where it was recorded that the symptoms had existed more than 48 hours. Of those eligible for consideration 370 or 26% of those receiving the drug and 99 or 34% of those receiving a placebo failed to make a report of the results of treatment. Of those who took phenindamine within 6 hours of onset of symptoms, 247 or 54% were cured within 24 hours. The percentage of cures declined as the interval of time between onset of symptoms and beginning of treatment lengthened and is illustrated in Table 1. However, 768 including all prompt cures or 75% of the cases who received phenindamine within 48 hours of onset of symptoms and who reported results, were either enthusiastic or volunteered that it was satisfactory treatment.

With reference to those who received placebos a much higher percentage failed to report results. Of those who received it within 6 hours after onset and reported the results of treatment, 33 or 32% obtained prompt relief. See Table 2.

At the top of each page of all log books were listed the data to be recorded. This included "side actions (to be anticipated) i.e., drowsiness,

TABLE 4
SIDE EFFECTS COMPLAINED OF BY
PATIENTS WHO RECEIVED A PLACEBO
IN TREATMENT OF COLDS

Side Effect	No. of Cases As a Primary Complaint	No. of Cases As a Secondary Complaint
Dizziness	7	2
Drowsiness	7	1
Headache	6	
Nausea	3	
Insomnia	2	2
Edema of Face	1	
Sinusitis	1	
Euphoria	1	
Nightmare		1

TABLE 5
RESULTS OF TREATMENT OF COLDS
WITH PHENINDAMINE IN PATIENTS
WITH HISTORY OF AN ACCEPTED
FORM OF ALLERGY

Type of Allergy	No. Cases Cured	No. Cases Improved	No. Cases Failure	No. Cases No Report
Asthma	5	8	19	12
Hay Fever .	25	23	17	23
Urticaria ...	7	9	2	7

nervous tension, hives, nausea, headache, etc.” This may unintentionally have prompted the asking of leading questions by our recorders.

Side actions were reported by an appreciable number of the 1,241 who received the drug regardless of the stage of their colds and who reported results. Many patients complained of more than one symptom; for example, insomnia and headache or drowsiness and dizziness. The most frequent complaint was drowsiness which was experienced by 154 or 12%. The next most frequent was dizziness by 84, followed by insomnia by 80, nervousness or jitters by 40 and headache by 35. See Table 3.

Oddly enough there were 28 patients or 10% of all who received a placebo and reported its effects who complained of side actions. See Table 4. There is food for thought here. It is believed that virtually all of these effects can be explained as being symptoms of the disease itself and this fact should be considered when tabulating side actions attributed to medications alone. Thus if an equal percentage were deducted from the number who reported side effects from phenindamine the result would be only 28%.

TABLE 6
RESULTS OF TREATMENT OF COLDS
WITH A PLACEBO IN PATIENTS WITH
A HISTORY OF ACCEPTED
FORM OF ALLERGY

Type of Allergy	No. Cases Cured	No. Cases Improved	No. Cases Failure	No. Cases No Report
Asthma	2	1	2	3
Hay Fever .	6	0	3	2
Urticaria ...	1	2	1	1

The results of the treatment in patients with a history of an accepted form of allergy were not remarkable as shown in Tables 5 and 6. Due to the very limited number of medical department personnel available to help and the difficulty of establishing proof of Coca's "Familial Nonreaginic Food Allergy"⁴, no attempt was made to isolate and record the results in this group which constitutes the major portion of the cold susceptibles as demonstrated by Spiesman and Arnold⁵, Locke and his co-workers⁶ and Coca.

Comment: The results obtained in this study are considered to be excellent. It is difficult to establish a scientifically accurate yardstick where diagnosis and end results are dependent largely upon subjective symptoms. However, it is now believed that when the average person states that he has had his symptoms for an hour, he counts from the moment when he became convinced that he had a cold and often doesn't include the several preceding hours of discomfort that represent the true initial stage. Thus, in many cases as much as 6 hours probably should be added to the number of hours stated as having passed prior to the beginning of treatment. This is particularly true in patients who contend that they first noticed their colds upon awakening in the morning. Every cold, like almost every fire, has a small beginning which if promptly and properly treated can be extinguished.

During the last month or so of the series it finally became known widely that a placebo was being used in a percentage of the cases. As a result, a great number of patients refused to take a chance on drawing a placebo and obtained their supplies in sizable quantities at their own expense from civilian sources independent of our treatment stations where it was provided free of charge. Contrary to the original conception of the study, many patients who started the

TABLE 7

WEEKLY NUMBER OF CASES OF INFLUENZA DURING WINTER OF 1948-1949 AS REPORTED BY THE CORPUS CHRISTI CITY, NUECES COUNTY, PUBLIC HEALTH DEPARTMENT IN THE LIST OF CONTAGIOUS DISEASES

Date	No. of Cases	Date	No. of Cases
October 16	34	January 1	45
October 23	33	January 8	76
October 30	17	January 15	66
November 6	36	January 22	64
November 13	23	January 29	130
November 20	37	February 5	129
November 27	39	February 12	153
December 4	58	February 19	70
December 11	69	February 26	117
December 18	85	March 5	142
December 25	51	March 12	43
		March 19	48

treatment too late to obtain a prompt cure, returned repeatedly for additional medication because of the relief it provided. It has been the author's experience during the past few years that once a patient has experienced the abortion of a cold with an antihistaminic drug, he becomes intensely loyal to that particular variety. It is almost as difficult to induce him to try another variety as it is to sell him a different make of automobile from the one he owns.

The high percentage of cures with a placebo was unexpected and disturbing until properly evaluated. It is believed that much of this success, like that with any therapy in treatment of colds, can be attributed to the fact that allergic reactions, manifested in the mucous membrane of the upper respiratory tract as the shock organ are quite common and self limited and account for the many times one believes he is catching cold only to have it disappear without treatment. Assuming this to be true, it could well account for the purported cures claimed for the wide variety of drugs and nostrums that have been produced and promoted through the ages. It could account for many that are now attributed to the effects of psycho-therapy. It is only when the pathogenic virus in a virulent form and in sufficient quantity is present to take advantage of this opportunity presented by an allergic reaction or when the patient is

devoid of any immunity, that the common cold develops.

One incident containing both scientific and human interest occurred. On one of my rounds to the treatment stations, a Lieutenant volunteered with enthusiasm that phenindamine had cured not only his wife's beginning cold but, also simultaneously, that of her infant, whom she was nursing and whose nose was also running badly. Apparently, the infant received enough of the drug from its mother's milk to be effective.

The percentage of cures diminished from late January until the middle of March. We were at a loss for an explanation until it was noted that this period corresponded with a sharp rise in the number of cases of influenza in the civilian community as reported by the City-County Public Health Department in its record of acute contagious diseases. See Table 7. This drop lowered the percentage of cures for the entire series.

CONCLUSIONS

1. Phenindamine is effective in the treatment of the common cold and will abort a large percentage of the attacks when taken promptly at the onset of symptoms.

2. Self limited and short lived allergic reactions occur with the mucous membrane of the upper respiratory tract as the shock organ. In the absence of the virulent causative virus and when the patient has a high degree of immunity, the common cold does not develop during and following such a reaction. Hence, the apparent cures from placebos as well as the long parade of cold remedies that have won popularity for limited periods of time down through the centuries.

3. The treatment of colds should be begun at the earliest possible moment if one is to obtain the best results.

SUMMARY

1. Phenindamine given in 25 mg. doses at 4 hour intervals for 3 doses, was used as the sole treatment in a large series of attacks of the common cold. As a control, parallel cases were given an equal number of pills of placebo which were identical in appearance.

2. A total of 54% of the cases who were given the drug and who started the treatment within 6 hours were cured within 24 hours and 75% of all cases who started it within 48 hours were

either cured or considered it satisfactory treatment. Of those who started treatment within 6 hours with the placebo, 32% were cured.

3. Side effects were reported by those who received the drug in the following order of frequency: drowsiness in 12%, dizziness in 6%, insomnia in 6%, "nervousness" in 3% and headache in 3%. Of those who received a placebo, 10% complained of side effects.

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The opinions contained in this article are those of the writer and are not to be construed as official or reflecting the views of the Navy Department or the Naval Service at large. The study was made as a hobby of the writer and was not an authorized research project under the auspices of the Bureau of Medicine & Surgery.

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Maternal Mortality in Illinois Hospitals, 1943-1947

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Chicago

Hospital maternity service during the five years 1943 through 1947 experienced unusual and trying situations. War conditions during the first half of this period were responsible for a harassed civilian medical profession, and after the armistice, the second half was characterized by an unprecedented increase in births, with overcrowding of hospitals acutely handicapped by shortage of trained personnel. The presence of these disturbing factors suggested a review of the maternal mortality in the hospitals of Illinois for 1943-1947, as shown by death certificates on file in the Division of Vital Statistics and Records of the State Department of Public Health. Another motive prompting this investigation was the inauguration in January 1948 of a program prepared by the Division of Maternal and Child Health, and approved by

both the Maternal Welfare Committee and the Council of the Illinois State Medical Society, for the thorough analysis of each death associated with gestation occurring in the hospitals of the state*. It was thought that any future studies of obstetric mortality would have greater significance if the experience of the preceding five years were on record.

The present study is of necessity confined to the limited information on the death certificates, namely: the cause of death, its international list number, the age of the patient, and the county hospital where the death occurred. The review also took note of any evidence of progress toward betterment of the record during the period under study, and of differences in the causes of maternal deaths as related to the age of the patient.

Table 1 shows for each of the five years the estimated population of the state, the total

From the Illinois Department of Public Health,
Roland R. Cross, M.D., Director; Division of Maternal
and Child Health, D. F. Rawlings, M.D., Chief.

Read before the Chicago Gynecological Society, Jan-
uary 21, 1949.

*Exclusive of Chicago where the Subcommittee on Maternal Mortality of the Joint Maternal Welfare Committee of Cook County has been actively engaged in such study since 1938.

Per cent

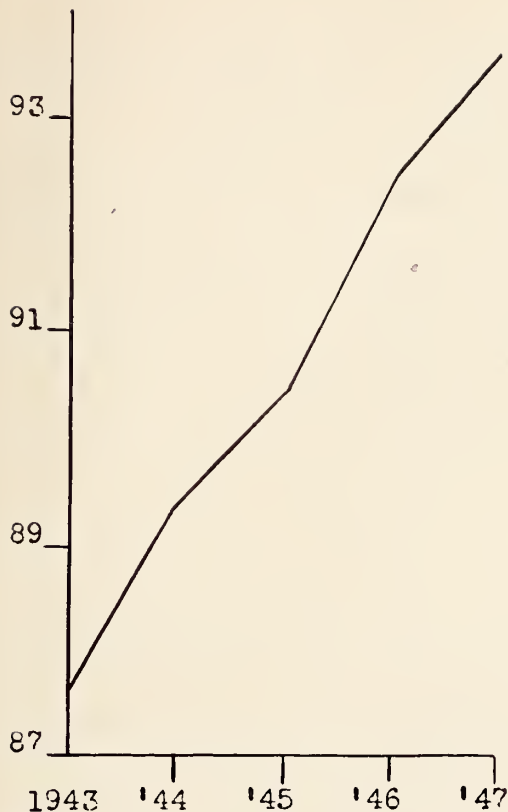


Figure 1. Per cent of total births in state occurring in hospitals.

Rate



Figure 2. Maternal death rate in Illinois hospitals per 1000 live births.

births, and the birth rate for Illinois per 1000 population.

TABLE 1. Data for Illinois

Year	Estimated population	Total births	Birth rate per 1000 population
1943	7,593,255	156,059	20.6
1944	7,630,000	141,854	18.6
1945	7,721,000	139,603	18.1
1946	8,180,000	175,023	21.4
1947	8,221,000	195,877	23.8

There is noted a drop in the birth rate from 20.6 per 1000 population in 1943 to 18.1 per 1000 population during 1945, and a rise to 23.8 per 1000 population, in 1947, the highest rate in the history of Illinois vital statistics.

Table 2 shows the total births occurring in hospitals, and the percentage this number bears to the total births in the state.

It is noted that there was an increasing number of hospital births, from 87.6 per cent in 1943 to 93.7 per cent in 1947.

TABLE 2. Number and Per Cent of Hospital Births

Year	Number of births in hospitals	Per Cent of Births in State
1943	136,649	87.6
1944	126,874	89.4
1945	126,309	90.5
1946	161,879	92.5
1947	183,511	93.7
	735,222	90.9

Table 3 shows the number of hospitals in Illinois giving maternity service, the number of live births, the number of maternal deaths, and its rate per 1000 live births.

The maternal death rate in Illinois hospitals showed a steady decline from 2.07 per 1000 live births in 1943 to 0.98 per 1000 live births in 1947. If the 1943 death rate had prevailed in 1947, that year would have had 373 maternal deaths, instead of the recorded 177, — a saving of 196 lives. It is particularly gratifying to note that this drop in the mortality rate took place during a time when the number of births in

TABLE 3. Live Births and Maternal Deaths in Illinois Hospitals

Year	Hospitals with maternity service	Live births	Maternal deaths	
			Number	Rate*
1943	238	133,882	277	2.07
1944	236	124,342	228	1.83
1945	232	123,825	222	1.79
1946	233	158,820	196	1.23
1947	229	180,388	177	0.98
		721,257	1100	1.52

*Per 1000 live births

Illinois was the largest in its history. For the five year period, in 721,257 live births there were 1100 maternal deaths, for a rate of 1.52 per 1000 live births.

Figures 1 and 2 illustrate by graph the data shown in Tables 2 and 3 respectively, — the increasing per cent of births in hospitals, and the decrease in the maternal death rate in hospitals per 1000 live births.

Table 4 shows the maternal deaths in Illinois hospitals by age groups for each year of the study and for the five year period.

The age range was from 14 to 58 years. About one-half of the deaths occurred in women from 26 to 35 years of age — an anticipated finding because it is this age group which shows the largest number of births.

Table 5 classifies the maternal deaths in Illinois hospitals, by cause, for each of the five years, 1943-1947, and for the five year period.

There is noted a variation in the relative rank of the listed causes: toxemia led the causes of death in each of four years, but was fourth in 1944; infection as a cause of death held fifth place in 1943, first in 1944, third in 1945, and second in 1946 and 1947; hemorrhage, which was fourth in 1943, was the second highest cause of death in 1945, and third in 1944, 1946, and 1947. For the five year period, this triad of obstetric emergencies accounted for nearly 64 per cent of all maternal deaths: toxemia being first with 25.8 per cent, infection second with 20.6 per cent, and hemorrhage third with 17.5 per cent. It is believed that this low rating of hemorrhage does not truly reflect its importance as a cause of maternal mortality. If one considers that prac-

TABLE 4. Maternal Deaths in Illinois Hospitals by Age Groups

Age group	1943		1944		1945		1946		1947		Total	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
14-20	20	7.2	22	9.6	18	8.1	15	7.6	23	13.0	98	8.9
21-25	53	19.1	51	22.4	39	17.6	41	20.9	35	19.8	219	19.9
26-30	75	27.1	52	22.8	55	24.8	48	24.5	43	24.3	273	24.8
31-35	71	25.6	53	23.2	62	27.9	46	23.5	32	18.1	264	24.0
36-40	43	15.5	31	13.6	34	15.3	37	18.9	32	18.1	177	16.1
41-58	15	5.4	12	5.3	13	5.9	9	4.6	12	6.7	61	5.5
Not shown	..	..	7	3.1	1	.4	..	..	..	..	8	0.7
Total	277	100%	228	100%	222	100%	196	100%	177	100%	1100	100%

TABLE 5. Maternal Deaths in Illinois Hospitals, by Cause

International List Number	Cause	1943		1944		1945		1946		1947		Total	
		No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
140 & 141	Abortion	39	14.1	44	19.3	36	16.2	24	12.3	17	9.6	160	14.5
142	Ectopic	12	4.3	17	7.4	17	7.6	13	6.6	12	6.8	71	6.5
143 & 146	Hemorrhage	37	13.4	43	18.9	46	20.7	38	19.4	29	16.4	193	17.5
144 & 148	Toxemia	81	29.2	41	18.0	53	23.9	61	31.1	48	27.1	284	25.8
145, & 149	Other Dis.												
	& Accidents	69	24.9	21	9.2	19	8.6	11	5.6	15	8.5	135	12.3
147	Infection	36	13.0	56	24.6	41	18.5	46	23.5	47	26.5	226	20.6
150	Unspecified	3	1.1	6	2.6	10	4.5	3	1.5	9	5.1	31	2.8
Total		277	100%	228	100%	222	100%	196	100%	177	100%	1100	100%

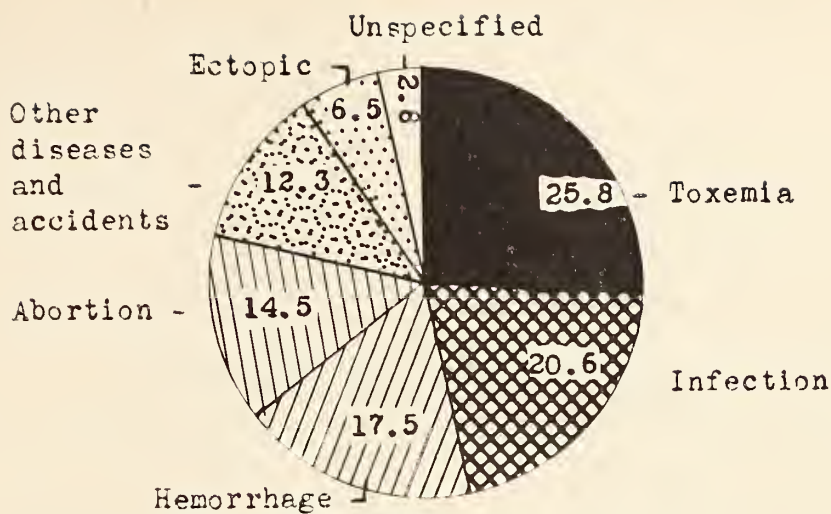


Figure 3

tically all ectopic deaths, and at least one-half of the abortion deaths, are due to bleeding, hemorrhage was shown as the leading cause for four years — 1944 through 1947 — and second to toxemia in 1943. A group of conditions listed under numbers 145 and 149, as “other diseases and accidents of pregnancy and puerperium,” held second place in 1943, but dropped to fifth in 1944, 1945, and 1947, and to sixth in 1946 — this is probably explained by the closer follow-up of maternal deaths and the more frequent querying of physicians by the Division of Vital Statistics and Records, leading to clearer statements of causes of death and their more proper

Figure 3 illustrates the proportion assumed by each cause of death in the five year total.

Table 6 shows the causes of death in relation to the age of the patient, and the totals for each age group and for each cause.

It is noted that while toxemia was the leading cause of death in each age group, it was particularly high in the youngest (14 to 20) and in the oldest (41 to 58) age groups, the percentages being 33.7 and 36.1 respectively. Death from abortion was most common, and death due to ectopic was rarely noted, in the 14 to 20 age group. Infection was a consistent cause of death in the six age groups, being second in four, and third in two of the groups. If the deaths from ectopic gestation and about one-half of those due to abortion were added to those attributed to hemorrhage, bleeding was the second highest killer of women in the youngest and oldest age groups, and first in the intervening groups.

DISCUSSION

Two topics in this presentation require further discussion: first, the factors responsible for the

TABLE 6. Cause of Death in Relation to Age of Patient

Cause	Age Groups												Total	
	14-20		21-25		26-30		31-35		36-40		41-58		Unspecified	Total
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent		No. Per cent
Abortion	22	22.4	34	15.5	43	15.8	25	9.5	28	15.8	8	13.1	..	160 14.5
Ectopic	1	1.0	16	7.3	12	4.4	23	8.7	19	10.7	..	..	..	71 6.5
Hemorrhage	15	15.3	40	18.3	44	16.1	50	18.9	34	19.2	10	16.4	..	193 17.5
Toxemia	33	33.7	61	27.9	61	22.3	64	24.2	40	22.6	22	36.1	3	284 25.8
Other Dis.	6	6.1	16	7.3	43	15.8	34	12.9	24	13.6	7	11.5	5	135 12.5
Infection	20	20.4	45	20.5	59	21.6	62	23.5	28	15.8	12	19.6	..	226 20.6
Unspecified	1	1.0	7	3.2	11	4.0	6	2.3	4	2.3	2	3.3	..	31 2.8
Totals	98	100%	219	100%	273	100%	264	100	177	100%	61	100%	8	1100 100%

improved mortality record, and secondly, the relative ranking of the various causes of obstetric deaths.

The betterment of the record noted in Table 3 and Figures 1 and 2 is due to several factors: a more conscientious effort by physicians to give better prenatal care, and to follow through with sounder intrapartal and postpartal obstetrics, the observance of improved technics, the increase in hospitalization of maternity patients, the more frequent use of blood transfusions, the advent of the sulfonamides and antibiotics, and the service rendered by the State Department of Public Health. It is this last mentioned item that deserves better understanding and wider appreciation.

The Illinois Department of Public Health has played a prominent part in the improvement shown in the five year record of the state's maternal mortality. Through its formation of policies for the conduct of acceptable hospital maternity divisions, its authority to license such divisions, its appraisal of obstetric facilities and equipment, its insistence upon maintenance of nursing standards, its cognizance of the value of pre-natal care by providing physicians and hospitals with obstetric and infant records, and its issuance of annual audits to each hospital of its obstetric activities, the Department has made a positive contribution for progress in obstetric practice in Illinois. It has been active in providing refresher courses in obstetrics for physicians, in holding discussion of obstetric problems and practices with hospital staffs, in arranging institutes for hospital personnel on specific subjects such as "Medical Records," and "Epidemic Diarrhea in Newborn," in making plasma more readily available to hospitals, in aiding in the establishment of classes for prospective parents, and in rendering advice on problems of nutrition. In addition to these efforts for elevating hospital standards, maintaining better nursing procedures, and favoring the education of the profession, hospital administrators, and the lay public, the Department has given further assistance to the saving of mothers' lives by the development of the program already mentioned for the study of maternal deaths occurring in the hospitals of the state. This project, in which the State Medical Society is cooperating, aims at a thorough fact-finding abstract from

the hospital records of each death associated with gestation, a personal interview with the attending physician, and a frank impartial discussion on an anonymous basis by the State Maternal Welfare Committee of all available data. This appraisal includes the character of prenatal care, sequence of symptoms, thoroughness of laboratory workup, adequacy of consultation, correctness of diagnosis, method of treatment, autopsy findings, question of preventability and assignment of responsibility. It is planned to make the results of this study available to the profession for its education and guidance.

Table 5 and Figure 3 provide data as to the relative frequency of the various complications responsible for maternal mortality. It should again be emphasized that conclusions based solely on causes as given on death certificates are not fully reliable. It is possible that physicians, for one or more of several reasons, do not record the complete or accurate diagnosis of the cause of death. This may be due to inadequate clinical examination, to limited medical information because of absence of biopsy, operation, laboratory tests, or particularly of postmortem examination, to personal interpretation of definition or of acceptance of terms, to deliberate alteration of the known facts, or to failure of the coroner to make adequate investigation. Undoubtedly, these factors prevail the country over. The Illinois maternal death study, through its careful review of clinical data and its efforts toward a higher incidence of postmortem examinations, should lead to the establishment of more correct diagnoses, and thereby securing information of sounder educational value.

SUMMARY

A review is given of the 1100 maternal deaths in Illinois hospitals during the five years 1943-1947. A reduction in the mortality rate is shown from 2.07 per 1000 live births in 1943 to 0.98 per 1000 live births in 1947. The causes of death are listed, and their relation to the age of the patient is noted. The three leading causes as given on the death certificates were: toxemia in 25.8 per cent, infection in 20.6 per cent, and hemorrhage in 17.5 per cent, for a total of 63.9 per cent. Abortion was responsible for 14.5 per cent of the deaths, and ectopic pregnancy for 6.5 per cent. Mention is made of the factors helpful in the improvement of the record, par-

ticularly the share attributed to the Illinois Department of Public Health, and of the current intensive maternal death study through which it

is hoped to attain a still further reduction in obstetric losses.

5038 Drexel Blvd.

Hemorrhoidectomy:

A Method for the Elimination of Postoperative Pain Due to Sphincter Spasm

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It is our purpose to describe a method of hemorrhoidectomy, by means of which we have been able to minimize or eliminate pain and prevent recurrences or complications. In our experience the unwillingness of patients to submit to hemorrhoidectomy has been based on the bad publicity concerning the operation, due to fear of the notorious postoperative pain and frequency of recurrence.

We were trained originally in the traditional "clamp and cautery" operation¹, and also in the "suture over a clamp" method². Neither of these methods satisfied us as to completeness of anatomical excision of the hemorrhoids, lack of complications and postoperative comfort. Postoperative pain was so salient a feature that we and other surgeons frequently resorted to blind injection of oily local anesthetics into the sphincter musculature as the first step in surgery. This procedure often alleviated pain, but a certain percentage of cases developed infection and deep abscesses with necrotic sloughing.

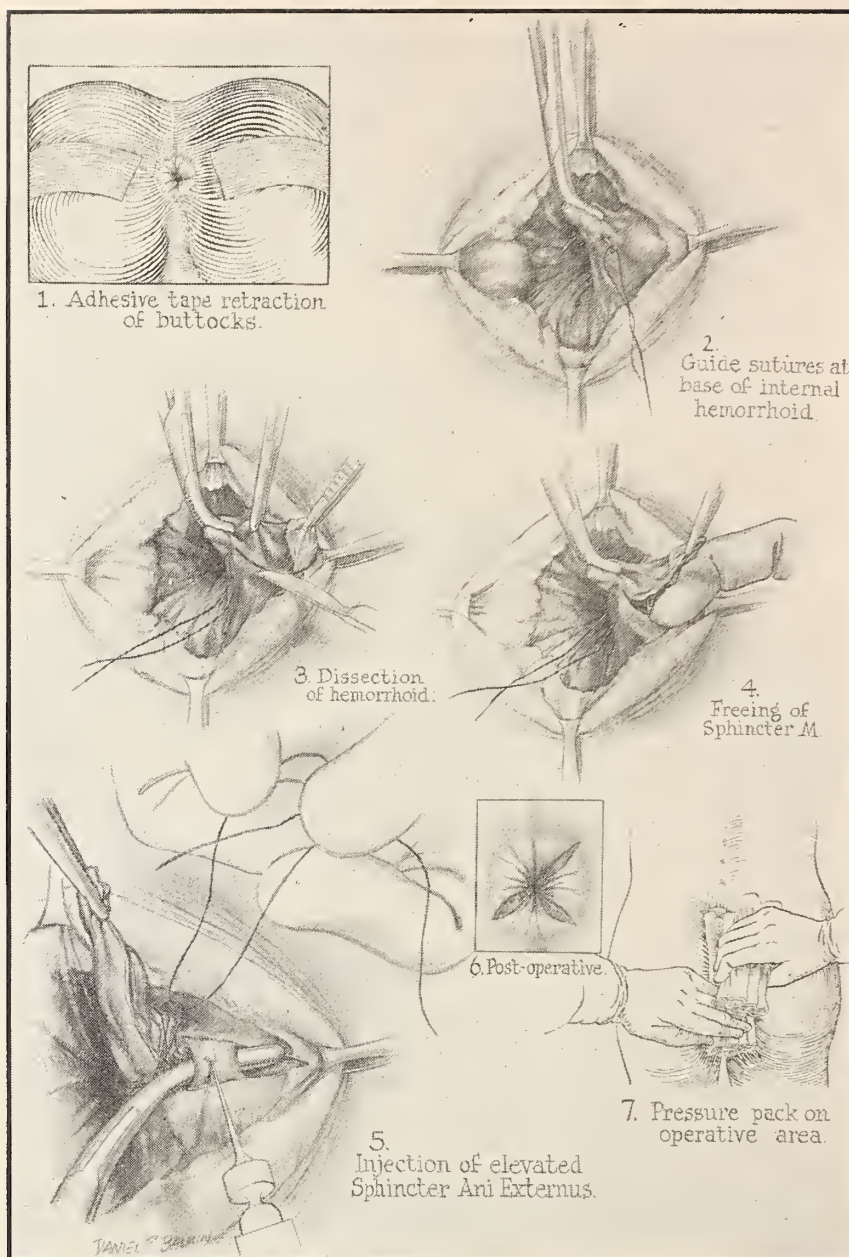
During our years of army service, we adopted the open technique of hemorrhoidectomy³, because by its use we were able to obtain a complete anatomical dissection and removal of all hemorrhoidal tissue and redundant mucosa and also prevent the occurrence of septic complications. The use of the open technique allows free drainage and does not have the tendency to seal in infection, as in the use of "clamp and cautery" and "suture over clamp".

The results with this operation were satisfactory, except that there was always a considerable percentage of patients who complained bitterly of postoperative pain. In the field, with an overseas evacuation hospital, it was difficult to administer hot sitz baths or hot wet compresses. The average soldier concerned us enough, but he was only with us for about two weeks before discharge. However, our own officer and enlisted personnel who lived with us for years throughout the war never let us forget the amount of pain they suffered.

The etiology of this post-hemorrhoidectomy pain always appeared to us to result from spasm of the anal sphincter musculature. According to Bacon⁴, the external sphincter ani muscle is voluntary and is composed of striated muscle fibers encircling the anal canal, beneath the skin of the anal margin. The nerve supply is derived from the second, third, and fourth sacral plexuses through the inferior hemorrhoidal and perineal nerves. The muscle has no antagonist and keeps the anus in tonic contraction and regulates the expulsion of feces. Our attack against post-hemorrhoidectomy pain, therefore was directed against spasm of the external anal sphincter.

With the open technique, the external anal sphincter is always exposed as shown in the accompanying illustrations (Figure 6). We decided to return to the use of an injection of oily local anesthetic directly into the exposed sphincter muscle. It is well established that muscle tissue is best able to receive substances in an oily vehicle. This technique avoids the com-

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plication of slough or infection which might follow submucosal or subcutaneous injection. The fact that no tissues were apposed over the injected muscle avoided the sealing in of any infection.

We were supplied overseas with nupercain* in oil and we used this for direct injection into the external anal sphincter with good results, as evidenced by absence of postoperative sphincter spasm and complications.

The following technique was used by us in one hundred and six consecutive cases during military service and in civilian practice up to the present. Of these, twenty-five cases were military and the

remaining civilian. All these cases had well marked internal and external hemorrhoids.

Anesthesia.—prior to the inception of this series of cases, we had used general anesthesia, or local field block, or low spinal anesthesia. General anesthesia required divulsion of the sphincter which is traumatic, and in addition general anesthesia usually necessitates the lithotomy position. We prefer the prone jack-knife position for adequate exposure and ease of operation. Low spinal anesthesia gave good analgesia and relaxation, but a large percentage of patients complained of postoperative headache. Local field block was adequate, but obliterated the land marks in the field of operation. Caudal trans-sacral anes-

*Courtesy of the Ciba Pharmaceutical Co.

thesia afforded good anesthesia and produced no postoperative headache or backache. It is our opinion that this is the anesthesia of choice for hemorrhoidectomy.

Technique of Operation.—after caudal trans-sacral anesthesia, the patient is placed on the table in the prone position, and middle of the table elevated so that the patient is moderately jack-knifed. The buttocks are retracted with wide strips of adhesive which is fastened to the side of the operating table (Figure 1). The excellent relaxation afforded by caudal trans-sacral anesthesia allows adequate exposure of the anal canal without divulsion of the sphincter fibers.

The anus is carefully surveyed for the number and extent of hemorrhoidal masses and the operation planned to excise these masses through radial incisions and still leave an adequate bridge of mucosa and skin between sites of excision. A curved hemostat is used to grasp the most inward aspect of the hemorrhoidal mass and a catgut suture is placed at this point and tied with ends left long (Figures 2 and 3). A V-shaped incision is made (Figure 4) in the skin to excise the external hemorrhoid and this is continued to the mucocutaneous juncture until the external anal sphincter is clearly exposed as it is freed from the hemorrhoidal mass (Figure 5). The lines of incision are extended inwardly to the previously placed guide suture, which marks the base of the hemorrhoidal mass. The internal mass is dissected free until it is about one quarter of an inch from the guide suture. The long ends of the guide suture are then used to ligate the hemorrhoidal mass at its base (Figure 5) and the mass is excised above the ligature. The lateral mucosal borders of this radial incision are elevated and any remaining venous tissue is removed from under the mucosa.

The above procedure leaves a clean radial area from which the hemorrhoidal tissue has been completely excised and the external anal sphincter is clearly exposed and easily palpable. A blunt curved clamp is inserted gently beneath the inner circumference of the external anal sphincter in order to elevate the sphincter (Figure 6). The sphincter is then injected with approximately one cubic centimeter of nupercain in oil, and there is no possibility of the oil entering any tissue except the muscle itself.

The remaining hemorrhoidal masses together with their redundant mucosa are excised through

radial slits as described above, and the sphincter injected with nupercain at each site. One quarter inch of intervening bridge of mucosa and skin is always left between excisions to prevent subsequent stricture formation. No sutures are placed to close the gaps in skin and mucosa and these are left to granulate in and epithelialize. Hemostasis is obtained by the suture at the base of the hemorrhoid and by catgut ligation of any bleeding vessels.

Material is not introduced into the rectum for packing or drainage. Pressure dressing is obtained by placing an inverted cone of gauze dressing in the intergluteal fold and then firmly apposing the buttocks by adhesive strapping. This controls post-operative oozing.

Post-Operative Care.—Patients are hospitalized usually for a period of four days. Injections of opiates are given every four hours if necessary for the first twenty-four hours, but the patient is rarely in need of this medication. Barbiturates are given for sleep. Full diet as tolerated is instituted immediately after operation. After the first twenty-four hours, the dressings are removed and while the patient is awake, hot wet compresses are applied every two hours. After thirty-six hours vegetable demulcents or mineral oil are given to produce a soft, bulky stool. On the second or third day, patients are ambulatory and take hot sitz baths three or four times daily. They are encouraged to move their bowels and if a bowel movement has not occurred by the fourth day, four ounces of oil are instilled in the rectum through a soft rubber catheter and followed by a pint of lukewarm tap water enema. The anus is dilated digitally before the patient leaves the hospital and weekly thereafter until completely healed.

The intramuscular nupercain in oil injection relaxes the sphincter for approximately eleven days as evidenced by the lack of spasm in the sphincter when digital examination is performed at the office one week after hospitalization. During this period some patients may lack complete control of the sphincter, especially when mineral oil is used.

Results.—In this series of one hundred and six patients, the spasmodic post-hemorrhoidectomy pain has been completely eliminated. Sixteen patients complained of mild, stinging pain or discomfort, but were not unduly disturbed by it.

There have been no postoperative rectal strictures and no recurrences have been discovered to date. Adequate follow-up after six months was obtained in only 40% of the operations performed in military service, but in 100% of the eighty-one cases operated in civilian practice.

There has been one hemorrhage occurring on the fourth postoperative day in an elderly hypertensive and arteriosclerotic female. This was controlled by packing for three days. One patient presented herself two months after operation with a superficial fistula-in-ano, which was excised under local anesthesia and healed rapidly. This patient is well after two years.

SUMMARY

1. A series of one hundred and six cases is presented in which the open technique of hemorrhoidectomy with injection of nupercain in oil

into the isolated sphincter under direct visualization is described.

2. The open technique allows complete and radical excision of the hemorrhoids as well as direct injection of the sphincter.

3. Postoperative sphincter spasm is eliminated.

4. There have been no recurrences to date and complications have been confined to one postoperative hemorrhage and one postoperative fistula-in-ano.

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Estimation of the Blood Requirements of the Surgical Patient

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The importance of supplying the surgical patient with adequate amounts of blood preoperatively has been well known. The present trend has been to keep the patient in as normal a physiological state before, during and after surgery. Certain types of individuals show a definite blood volume deficit. These patients tolerated surgery well when this deficiency was corrected.^{1,2}

Numerous methods have been devised to determine the circulating blood volume.³⁻¹⁶ Many of these methods have disadvantages in that they have been tedious, cumbersome, time consuming or involved a great deal of technical procedure in addition to having required special equipment. A simple bedside method of calculating the blood requirements of certain types of surgical patients has been devised, which has proven to be of practical value — *weight loss in pounds \times 50 = the*

number of cubic centimeters of blood required by the patient prior to surgery in order to restore his blood volume to a normal state. This formula applied to those patients who had lost over ten pounds of weight. This method did not apply to patients who had lost blood by hemorrhage or burn cases.

Twenty-five patients were in this series. Carcinomas of the colon, ileum, lung, pancreas, stomach, rectum with and without metastasis were studied. Some of the other diagnoses were inguinal hernia, tuberculous peritonitis, redundant pyloric mucosa, stricture of the ileum, skin ulcer left ankle, duodenal ulcer with and without obstruction, post-operative gastrectomy, gastric ulcer and varicose veins. The weight loss varied from 11 to 50 pounds, the average being 27 pounds.

TABLE SHOWING COMPARISON OF DETERMINED BLOOD VOLUMES WITH EVANS BLUE DYE METHOD (T-1824) & BLOOD REQUIREMENTS DETERMINED BY FORMULA — WT. LOSS IN POUNDS X 50

Case Number	Determined Blood Volume in cc. with T-1824 (Evans Blue)	Calculated Blood Volume on Average Weight in Health in cc.	Determined Blood Volume on Average Weight Greater than Determined (T-1824) Blood Volume in cc.	Calculated Blood Volume on Average Weight Greater than Determined Blood Volume in cc. (T-1824)	Calculated Amount of Blood Required in cc. by Formula — Weight Loss in Pounds X 50	Calculated Blood Volume (by Formula) Greater than that Determined with T-1824 Method in cc.	Calculated Blood Volume by Formula less than Determined with T-1824 Method in cc.	Pints of Blood Required Employing the Evans Blue Method	Pints of Blood Required Determined on Basis of Weight Loss in Pounds X 50	Weight Range	Weight Loss in Pounds	Diagnosis of Case
1.	29067	5208	6179	971	1250	279		2	3	160-135	25	ca of colon
2.	28665	4444	6475	1911	1750		161	4	4	165-135	35	ca of ileum with met.
3.	28069	4603	4845	242	1100	858		1	2	127-105	22	ca of lung
4.	28248	3333	5725*	2392	2300		92	5	5	160-114	46	ca of pancreas with met.
5.	28639	5634	5780	146	1000	854		1	2	150-130	20	ca of stomach with met.
6.	26885	5800	6645	845	1200	355		2	3	170-146	24	ca stomach
7.	28525	3093	5406	2313	1600		713	5	3	140-108	32	ca stomach with met.
8.	26365	3769	5408	1739	2250	511		4	5	140-95	45	ca stomach
9.	28106	4596	5795	1199	2400	1201		3	5	150-102	48	ca stomach with met.
10.	27024	2648	5984	2336	2500	164		5	5	155-105	50	ca stomach
11.	26804	5441	5408	33	1000	1033		0	2	140-120	20	ca rectum
12.	28703	5084	6179	1095	1800	705		2	4	160-124	36	ca rectum
13.	28354	4615	5355	740	550		190	2	1	150-139	11	fractured tibia
14.	28933	5285	6120*	835	600		235	2	1	189-177	12	hernia & hemorrhoid
15.	28570	4863	5950*	1097	1650	553		2	4	185-152	33	tbc peritonitis
16.	28325	4166	5210	1044	1100	56		2	2	135-113	22	redundant pyloric mucosa
17.	29038	4438	5525	1087	1400	313		2	3	143-115	28	stricture of ileum
18.	28211	5357	6075	718	750	32		2	2	165-150	15	ulcer left ankle
19.	29002	5288	5685	397	750	353		1	2	148-133	15	duodenal ulcer with obstruction
20.	29144	4590	5290	700	1300	600		2	3	138-112	26	duodenal ulcer with obstruction
21.	27697	4776	5950	1174	1500	326		3	3	154-114	30	duodenal ulcer
22.	28503	4724	6757	2033	2000		33	4	4	175-135	40	post-operative gastrectomy
23.	26980	6271	6298	27	550	523		0	1	163-152	11	gastric ulcer
24.	28257	4687	5440	753	850	97		2	2	142-125	17	gastric ulcer
25.	29211	4132	5211	1079	900		179	2	2	135-117	18	varicose veins
AVERAGE		4714	5783	33	1075	1360	490	229	2.4	2.9	27	

*Height, weight, age & sex tables utilized to determine average weight in health.

Procedure and Technique. — 'The circulating blood volume was determined with the Evans Blue azo dye T-1824. The blood volume was calculated on the average weight in health. The difference between these figures was the amount of blood required, when the Evans Blue method was employed. In three instances standard tables for height, weight, age and sex were used. These were in patients who were obese prior to illness, thin or patients who because of prolonged illness never attained optimal weight.¹ A second calculation was made of the weight loss in pounds by determining the difference between the present weight and the average normal weight in health. The weight loss in pounds was then multiplied by the factor 50 in order to determine the number of cubic centimeters of blood required. Blood was administered to these patients in 500 cc. quantities. If the amount required was over 100 cc., a pint was administered. For example: The patient whose blood deficit was calculated to be 1095 cc. would receive 2 pints of blood, whereas one whose blood volume deficit was found to be 1650 cc. of blood would receive 4 pints of blood. A comparison of the two methods were made, which is expressed in the accompanying table.

The procedure utilized for the blood volume determination with the Evans Blue dye was the result of work done on this subject by Gibson and Evans,^{3,4} Gibson and Evelyn,⁵ Gregersen, Gibson and Stead,⁶ Gregersen⁷ and Clark, Nelson, Lyons, Mayerson and DeCamp.^{1,2,14} This procedure with a few slight modifications was essentially the same as that utilized by the latter group. 30 cc. of blood was withdrawn (in an heparinized syringe) from the antecubital vein without tourniquet compression, in fasting patients who had been lying quietly for ten minutes prior to the test. Five cc. of Evans Blue dye (T-1824) was injected into the same vein after it had been measured in a calibrated syringe. Blood was withdrawn into the same syringe and reinjected three times into the same vein. A second 30 cc. blood sample was drawn from the opposite antecubital vein (without tourniquet compression) exactly ten minutes after the dye had been injected. This sample was also collected in an heparinized syringe. A Wintrobe hematocrit tube was filled to the proper mark with blood from the first

sample.¹⁷ The remainder of the first blood sample and the second sample were respectively transferred to paraffinized centrifuge tubes. The blood samples and the hematocrit tube were centrifuged for 30 minutes at 3000 revolutions per minute. The optical density of the plasma and a standard were determined with a 620 mu filter in the Lumetron photoelectric colorimeter. The plasma volume was determined by dividing the optical density of the standard by the optical density of the unknown and multiplying the result by 2500. The plasma volume was then multiplied by 100 and divided by the factor 100 minus the hematocrit, which gave the blood volume.

Discussion. — The amount of blood required by the surgical patient prior to surgery has been estimated by a simple formula utilizing the weight loss in pounds multiplied by the factor 50. A comparison of the Evans Blue dye method and the above method was made as shown in the accompanying table. It has been found that the above formula does not apply in patients who have lost ten pounds or less in weight, nor to burn or hemorrhage cases. The average amount of blood required was 2.4 pints with the Evans Blue method and 2.9 pints with the simple calculation method. In three instances in this series of patients, insufficient amounts of blood would have been administered with the calculation method, however, in one instance this value was 240 cc. and in a second, 325 cc. These values would not be clinically significant in view of the fact that these figures come well within the percentage of error of the Evans Blue dye method. The third case was one which would have been 813 cc. short, but this case had a carcinoma of the stomach with metastasis and was moribund. For practical purposes, the simple calculation method works very well and is within the limits of clinical error.

SUMMARY

Twenty-five cases with weight loss varying from 11 to 50 pounds were studied to determine the blood requirements. A comparison was made of the Evans Blue dye method and a simple calculation method, weight loss in pounds X 50 = number of cc. of blood required. The amount of blood received by the patients would have been adequate except in one instance, which was moribund with carcinoma of the stomach with metastasis. This method is simple, requires no special

apparatus and is sufficiently accurate for clinical use.

CONCLUSION

The number of cubic centimeters of blood required by certain types of cases with oligemia may be determined by multiplying the weight loss in pounds by the factor 50.

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SMEAR TEST DETECTS INACCESSIBLE CANCERS

Earlier detection of cancers arising in the gallbladder, pancreas, and certain bile ducts appears to be possible by use of the smear test, two Boston doctors report in the Sept. 24 Journal of the American Medical Association.

The test is the most hopeful technique yet described for early detection of this group of otherwise obscure and inaccessible malignant tumors which accounts for at least 10,000 deaths annually in the United States, say Drs. Henry M. Lemon and Walter W. Byrnes.

The smear test is based on examination under the microscope of shed body cells to see if cells indicating

a malignant condition are present. Sediments of material taken from the portion of the small intestine adjoining the stomach are stained by the method developed by Dr. George N. Papanicolaou of the Cornell University Medical College, New York, according to the article.

The doctors studied 38 patients with nonmalignant disease of the liver, pancreas, small intestine, and biliary tract and 16 patients with proved cancer of these areas.

In none of the patients with nonmalignant disease did the smear test show even questionable evidence of cancer. In the 16 cases of proved cancer, 11 were suspected or diagnosed from the smear test.

CASE REPORTS



Unrecognized Pernicious Anemia In Patients With Chronic Arthritic Complaints

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Subacute combined cord degeneration might, in the absence of an accurate clinical appraisal, be improperly diagnosed and treated as chronic arthritis with deleterious results to the patient.

Current thought tends to be sanguine about the pernicious anemia problem. Haden and Bortz¹, recently reiterated the common belief that its treatment is a great medical triumph. A large life insurance company² refers to the extremely low death rate from pernicious anemia, 7000 fewer than in 1926 when liver therapy was introduced. Among its policyholders, mortality has declined 82% in the age group 1-74 and 80% in the group 45-74 where mortality is concentrated. Even about neurological pernicious anemia, Rundles³ stated the prognosis was better than generally recognized.

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It must be mentioned that liver controls, does not cure the disease and that to the estimate of 100,000 patients of Murphy⁴ in 1948 some unrecognized pernicious anemia patients should be added.

The cardinal signs of pernicious anemia are well known. The central nervous system symptoms may be accorded repetition. Haden¹ called these the serious and crippling lesions of the disease, indicating that severe neurological involvement might accompany mild anemia.

Bethell and Sturgis⁵, reviewing 70 patients over 10 years, stated that while most cases showed improvement with specific therapy, the period of that improvement was limited to the first year and the period of greatest recovery was the first six months. The danger of suboptimal therapy was emphasized. Rundles³ made similar observations. For the neurological residuals beyond the recovery period, no therapy is at hand.

The neurological relapse includes cerebral disease, an entity long known to psychiatrists⁶. Adams and Kubie⁷ presented two cases and reviewed the literature in 1944, summarizing 14 cases with neuropathology. The salient features of subacute degeneration of the brain in the early stages are drowsiness, confusion, irritability, memory defect, mental sluggishness, easy fatigue, apathy and disinclination for mental effort; there are difficulties of attention, stressed in most case histories. In the later stages there may be suspiciousness, delusions of persecution, depressions of varying degree, hallucinations, delirium, disorientation and frank psychoses.

Clinicians have estimated the central nervous system involvement to be frequent. Wintrobe⁸ suggests 70-85%, Haden⁹ 80-85%. More pertinent to the practitioner is the estimate that in 25% the cord changes may attract attention to the disease for the first time. Thus, even with careful appraisal, the ideal of early and exact diagnosis is not always a possibility.

In the two cases presented, chronic arthritis was the incorrect diagnosis under which the neurological pernicious anemia progressed because specific therapy was not given.

Case 1. A. white female, 63, was referred by a urologist on July 15, 1946. A urinary infection had been successfully treated. Her complaint was unsatisfactory treatment of leg and arm symptoms diagnosed as arthritis. There had been a sore tongue in 1943, seen by a physician, which disappeared without therapy. A second physician prescribed vitamins a few months later for complaints of weakness and easy fatigue. For 18 months prior to July 1946 she had been managed by a third physician as an arthritic. Numbness and weakness of the extremities had progressed while injections were being given for arthritis and the accompanying anemia. Additional complaints at the first examination included fullness after eating, marked fatigue, shortness of breath, edema of the ankles. Gait was staggering; the patient supported herself on walls or furniture. She was grey-haired, appearing older than 63 and the skin had a yellow tint. Arteriosclerosis was evident in retinal arteries. Knee jerks were present only with reinforcement and were inconstant. Romberg's sign was positive. Vibratory sense was absent to the knees bilaterally. Blood pressure was 186 systolic, 90 diastolic. Hematologic findings included hemo-

goblin 11 grams per 100 c.c., erythrocytes 2.77 million, leucocytes 7350 with normal differential. Blood Kahn was negative. The color index was 1.36. Gastric analysis (alcohol meal) revealed no free acid. On July 31, after liver therapy was in effect a few days, erythrocytes were 4.13, hemoglobin 12.5 grams, hematocrit 41.2%. The mean corpuscular volume was 100. Reticulocyte determination revealed an inconclusive 0.7%. The diagnosis of pernicious anemia with subacute combined cord degeneration was considered established and intensive parenteral liver therapy begun. Within 6 weeks a subjective improvement was noted in gait along with a scattered return of vibration sense. The Romberg test revealed less swaying of the patient. After 4 months, erythrocytes reached 4.67 million, hemoglobin 12 grams. The Romberg test became negative and further improvement was noted in gait. The lower extremities still had a heavy feeling subjectively. In February 1947 the patient moved to another city where treatment was continued, returning at irregular intervals for examination. In June 1947 she was seen with erythrocytes 5.18 million, hemoglobin 13 grams. Vibration sense was present, in diminished degree, from ankle to mid tibia, normal from mid-tibia to knee. She had at this time dispensed with her cane. In Oct. 1947, vibration sense, gait and posture were normal for a lady of 64 years. Improvement was maintained when last seen in early 1949. The knee jerks did not return to normal and a certain heaviness of the legs did not completely disappear. Therapy continues.

Case 2. A white female, 74, presented herself on April 20, 1948 for consideration of unsatisfactory progress in treatment for arthritis of the knees by another physician. In the six months prior to examination, she had received intravenous and intramuscular medication and at least three oral medications. Liver therapy of some sort was part of this regime. Her complaint was described as arthritis. Specifically it was pain, weakness and disability of both lower extremities, easy loss of balance and a tendency to stagger at times. She fatigued easily. She was ambulatory, though with difficulty. The most distressing complaints were a strange feeling in the head as of being completely played out and an extreme drowsiness. Impairment of memory and inability to give attention to a given task

were sources of great anxiety. She had been a woman used to being active intellectually and in useful social pursuits. These mental symptoms had progressed rapidly in the past six months. Examination revealed a well-nourished woman, walking with difficulty. Blood pressure was 144 systolic, 80 diastolic. Obviously ataxic, she had a negative Romberg test, coordinated well. Vibration sense was absent from the knee to the malleoli bilaterally. The knee and ankle reflexes were absent. Some edema of the ankles was noted. Laboratory tests revealed: erythrocytes 3.57 on April 20. On April 23, the erythrocyte count was 3.45, hemoglobin 13.05, leucocytes 5550 with normal differential, hematocrit 40, color index 1.26, mean corpuscular volume 113. Gastric analysis (alcohol meal) revealed no free acid. Blood Kahn was negative. The diagnosis was macrocytic anemia with subacute combined cord degeneration. Intensive liver therapy was started even though a definite diagnosis of pernicious anemia was not established. The risk of inducing a relapse for diagnosis was considered unwise for fear of fostering mental deterioration. By June 1948, vibration sense was returning. Improvement in strength and gait was evident. After five months therapy the erythrocytes had risen to 4.5 million, neurological and mental improvement were noted. In ensuing months, improvement was slow. The patient is well aware of the concurrent aging process, yet is aware too of improvement in physical and mental vigor. Therapy continues.

COMMENT

These two patients have subacute combined cord degeneration. Case 1 is a typical pernicious anemia with cord changes; case 2 presents cerebral changes consistent with subacute degeneration of the brain tissue, although arteriosclerotic changes might be invoked as a cause. Wilson¹⁰, stresses the prominence of vascular combined disease, but states that the diagnosis of pernicious anemia is justified in the absence of a typical blood picture when some degree exists of anemia accompanied by achlorhydria. Beebe and Wintrobe¹¹ state that macrocytosis, even when anemia is slight, aids in differentiation from arteriosclerosis. The rapid progression of mental symptoms, as in case 2, suggested to Rundles³ that pernicious anemia be favored as a diagnosis over arteriosclerotic cord and brain

changes. Admittedly in the elderly, mental changes require careful consideration of many factors. The presence of macrocytic anemia, achlorhydria and subacute combined cord degeneration establish the diagnosis reasonably well in the second case.

A method of establishing the diagnosis of pernicious anemia, available to limited clinical centers, has been described^{11,12}. Beef digested with the patient's gastric juice is given to a known pernicious anemia patient in relapse. The presence of intrinsic factor is proven by a favorable response of the relapsed patient.

Consideration of pernicious anemia in the patient with chronic arthritic symptoms has been pointed out by rheumatologists including Comroe¹³. Isaacs¹⁴ has said that healthy geriatric patients show no characteristic abnormalities of the blood except slight decrease in erythrocytes and hemoglobin. Finally, in arthritis the anemia is hypochromic and the neurologic findings of cord disease absent. Pernicious anemia should, therefore, stand out clearly against a background of senility, arteriosclerosis and rheumatism.

SUMMARY

Two cases are described in which subacute combined cord degeneration progressed because the patients were mistakenly treated as chronic arthritis. Late specific therapy led to partial recovery.

The gravity of neuroanemia and the incomplete recovery on liver therapy encourage early diagnosis.

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Eventration of the Intestine Through the Vagina Following Vaginal Hysterectomy

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Oak Park

Eventration of the intestine through the vagina following vaginal hysterectomy is apparently a very rare condition. A considerable search of the package library and of the indices at the American College of Surgeons has yielded only scant reference to it in the literature.

Bröse, in 1909, reported a case of enterocele following vaginal hysterectomy in which the intestine prolapsed through an eroded area in the vaginal mucosa and became strangulated — this he corrected by vaginal operation.

Rieunau, in 1933, reported a case of vaginal eventration of a loop of small intestine fourteen years after vaginal hysterectomy — this he corrected by laparotomy.

These are the only two cases we have been able to locate in the literature of true eventration of the intestine through the vagina following vaginal hysterectomy. There are many references to cases of prolapse but they cannot be classified with the above cases nor with the one about to be reported.

Because of the rarity of this condition, we felt justified in reporting the following case.

Mrs. N. B., age 74, Para II, was referred to me by Dr. Cecil Cooper at the West Suburban Hospital in October, 1946, because of complete procidencia. This condition had been getting progressively worse during the past several years and had recently caused her a great deal of distress. This patient was obese, weight 210 Lbs., and had been under treatment for a number of

years for pernicious anemia. However, at this time her anemia was under control — Hg; 70%; blood pressure — 158/100; urine — neg.; and she seemed to be in fairly good physical condition considering her age. Because of the great distress she was having from the prolapse, it was decided to correct it by vaginal hysterectomy.

On October 17, 1946, we did a vaginal hysterectomy according to the Mayo-Ward technique — using the upper portion of the broad ligaments to interpose between the symphysis pubis and the bladder, and using the Ward Rectopexy suture to close the posterial vaginal opening. Thus, using the base of the broad ligaments and utero-sacral ligaments to close the cul-de-sac and support the rectum and posterior vaginal vault. Needless to say, the recto-vaginal fascia in this case was unusually thin. The patient made an uneventful recovery from this operation and was sent home on the twelfth post operative day. She was seen at the office about six weeks after the operation and had a satisfactory result. She was relieved from her distress and had good control of the bladder and rectum. However, it was noted that there was a very small enterocele rather high in the shortened vaginal vault but since it was causing no symptoms, nothing was done to correct it.

On January 20, 1948, fifteen months after the above operation, the patient, while at the toilet, noticed something protruding from the vagina. She immediately called her attending physician who diagnosed the case as one of eventration and took her to the hospital.

Presented before the Chicago Gynecological Society, May, 1948.

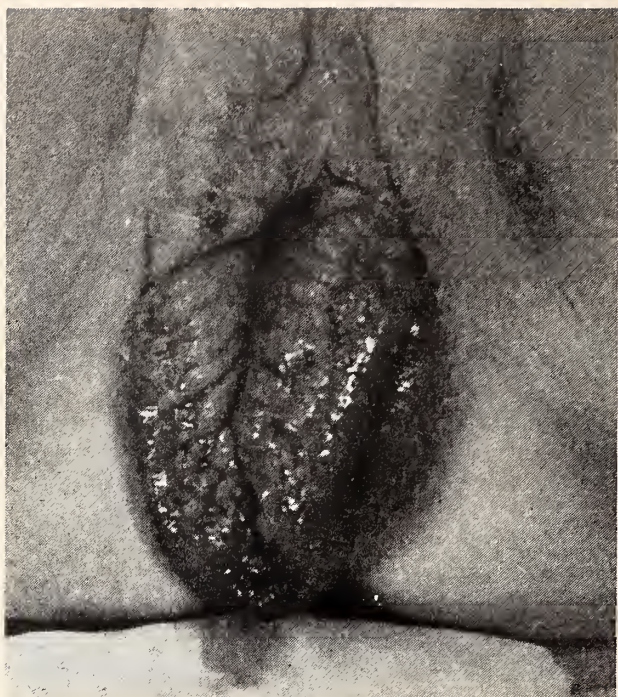


Figure 1

On examination at the hospital, it was found that several loops of illium were protruding through the vagina and hanging over the vulva. They were not covered by vaginal mucosa or peritoneum. The patient had practically no shock and was suffering only from moderate dragging pain and great fear. See Figure 1.

The patient was placed in the lithotomy position and the vulva prepared as carefully as possible. The intestines were thoroughly irrigated with warm normal saline solution. On inserting

a finger into the vagina, a small opening, barely large enough to admit the index finger, was found about three centimeters above the vaginal introitus. Through this opening the intestine had escaped. Attempts to reduce the intestine through this opening were unsuccessful. The opening was therefore enlarged by digital and blunt dissection until the intestines were successfully replaced. A small lap sponge was then inserted into the cul-de-sac to retain the intestines until the repair could be made. The vaginal tissues were dissected back until the base of the broad ligament was found and some relatively firm fascia on the posterior surface of the vaginal flap was identified. A purse-string suture was then inserted in such a manner as to close this opening. The lap sponge was then removed and five grams of sulphathiazole was instilled into the cul-de-sac. The purse string was then tied. The fascia on the posterior vaginal wall was brought together by mattress sutures to strengthen the purse string closure. A small amount of vaginal mucosa was then trimmed off and the edges approximated.

The patient again made an uneventful recovery and left the hospital on the fourteenth post operative day. She was seen at the office on April 19, 1948, — three months after the operation. She has regained her strength and is feeling better than she did following the first operation. The vagina is firmly healed and admits one finger to the depth of one phalanx. There is no evidence of recurrence.

715 Lake Street.

SURGEONS REMOVE PLUG BLOCKING ABDOMINAL ARTERY

Successful surgery to remove a plug blocking the circulation of the main abdominal artery is reported in the Oct. 8 Journal of the American Medical Association.

Two cases in which lives of patients apparently were saved by making incisions directly into the artery and removing the mass that had formed are described by surgeons from Memphis, Tenn., and Honolulu.

One operation was performed by Dr. Harwell Wil-

son of the University of Tennessee College of Medicine, Memphis, at the Baptist Memorial Hospital in that city. The patient, a 57-year-old man who had previously had varicose veins and blood clots in his legs, was sitting at his desk when he suddenly felt both legs become numb and cool. Five hours later the surgery was performed, and he recovered.

The other patient, reported by Drs. C. M. Burgess and A. S. Hartwell of Honolulu, was seized by severe pain in his abdomen and back and his legs became cold. Nine months after the operation he was back at work.

PATHOLOGY CONFERENCES

EDWIN F. HIRSCH, DEPARTMENT EDITOR



Presentation of Three Cases

Herman Josephy, M.D.

Chicago State Hospital
Chicago

DIFFUSE CARCINOMA OF THE STOMACH, WITH EARLY MISLEADING METASTASES

A white woman, 57 years old, was admitted to the surgical service at the Chicago State Hospital in August 1947. For about 9 months some nodes appeared in her left axilla, and were increasing in size. Physical examination revealed no significant pathology, other than the masses in the axilla. There were no nodes in either breast. X rays of the lungs were negative. There was no anemia.

Six years before the axillary nodes appeared, gynecological surgery had been performed. However, according to the report of the surgeon, there was no indication whatsoever of a malignancy in the pelvis. The axillary nodes removed on August 18, 1947, consisted of a large and apparently well encapsulated node, 6 by 4 by 2 cm, and a piece of fat with several small nodes. All nodes were hard.

Microscopical examination revealed lymph nodes invaded by a cancerous tumor. Most of the lymphatic tissue was replaced by fairly uni-

form, medium-sized cells with a large nucleus. These cells were arranged in solid strands and masses, separated by a small amount of connective tissue. Axillary fat and lymphatics were invaded. There was some question whether these cells represented a reticulum cell sarcoma or a carcinoma. Finally, the latter diagnosis was decided upon. As neither glandular structures nor goblet cells were found, it was added that a primary cancer of the intestinal tract probably was not the source of the metastasis. Neither was there any clinical evidence of such malignancy. Blood counts and hemoglobin determinations during this time yielded normal results.

The presence of a small, clinically hidden primary carcinoma of the mammary gland was considered and finally, in December 1947, the left breast was amputated. However a thorough gross and microscopical examination of the tissues removed failed to reveal a cancerous growth.

The patient made an uneventful recovery and was able to work from April 1948 to the middle of December 1948, when she reentered the hos-

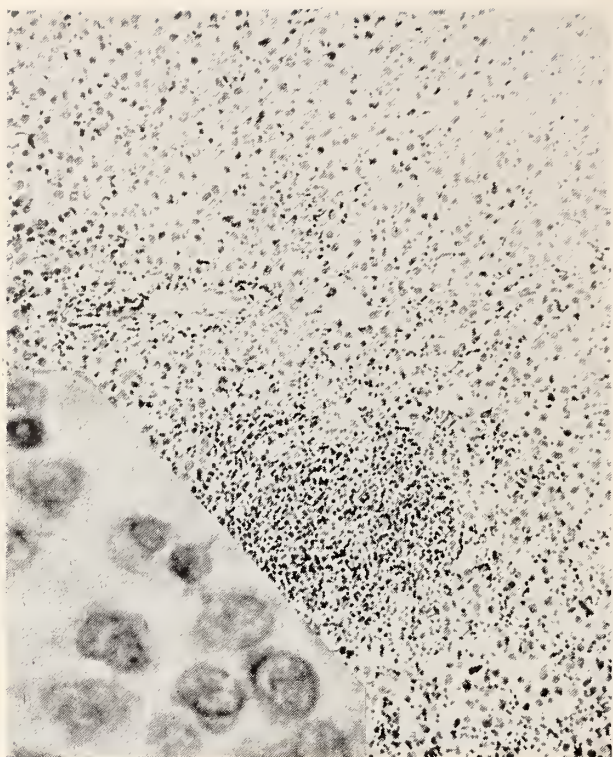


Figure 1. Photomicrograph of a section taken from the axillary lymphnodes removed in August 1947. The lymphatic tissue (dark round nuclei) is almost completely replaced by large tumor cells. Inset shows the tumor cells at high power magnification.

pital. An x ray of the stomach at this time revealed irregularity and constriction of the antrum, and since the patient rapidly grew worse, she obviously had a cancer of the stomach.

She expired on February 1, 1949, more than two years after the first tumor nodes in the left axilla had appeared.

The main findings at the autopsy were:

Diffusely infiltrative carcinoma of the stomach, metastatic carcinoma of the lymph nodes of the anterior mediastinum, the epicardium, the abdominal lymph nodes, the peritoneum, the liver, the right kidney, the uterus, and the right ovary.

The pyloric portion of the stomach was rigid and hard; a section through the wall of the stomach revealed that the muscularis was diffusely infiltrated by white hard tumor tissues; the wall measured about 2 cm in width at the pyloric end. The tumorous infiltration could be followed into the fundus, where it tapered off to a thin layer. The mucosa of the stomach had no circumscribed tumor or ulcer. It had normal folds and a gray-red color. In the pyloric region, it seemed to be slightly ulcerated. There were adhesions between the stomach and the hepatic flexure of

the colon. The wall of the colon was slightly invaded by tumor, the mucosa was intact.

Carcinoma metastases were found as indicated above, those in the uterus and the right ovary were noteworthy. The myometrium had many tumor nodes, the uterine mucosa and the cervix were normal. The right ovary (the left one had been removed 8 years prior to death) was 5 cm in diameter. It was hard, gray and its surface had retracted and protruding regions.

Microscopical examination of the stomach revealed a diffusely infiltrative cellular carcinoma. The muscular layer and the serosa had medium sized polyhedral cells with a large nucleus. They were arranged in strands and masses, and without gland formations. The microscopic structure was the same, as that in the axillary lymph nodes removed 11½ years prior to death. The gastric mucosa was spared from tumor invasion, except in the pyloric region, where the normal epithelium had disappeared and was replaced by tumor cells in a diffuse arrangement. All metastatic nodes had the same structure as the primary tumor.

COMMENT

The gastric tumor is a diffuse carcinoma according to Ewing's classification. It is markedly anaplastic and the histological structure suggests a high grade malignancy. Probably, it originated in the pyloric region.

There can be no doubt, that the enlarged lymph nodes in the left axilla which appeared more than two years prior to death, were metastases of this gastric carcinoma. The



Figure 2. Stomach, exhibiting diffuse carcinoma. Note the width of the stomach wall in the pyloric region.

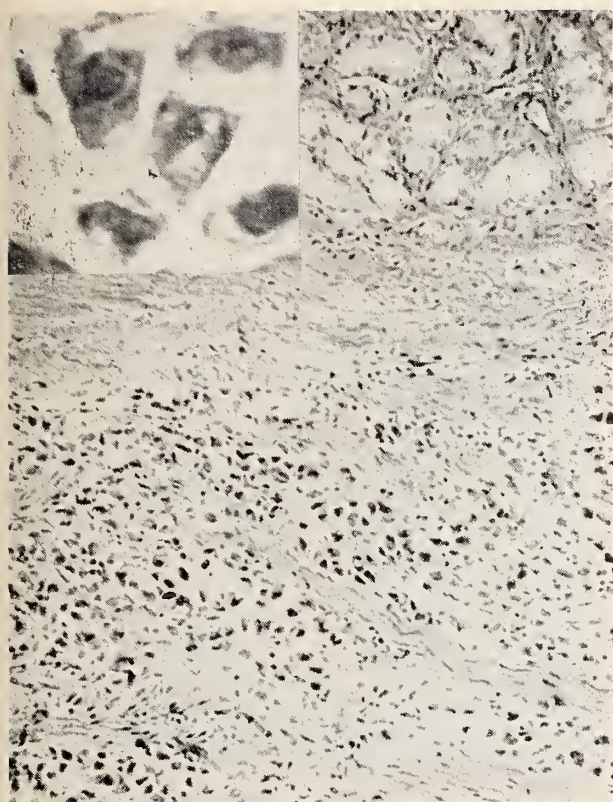


Figure 3. Photomicrograph of the stomach cancer. The muscularis is diffusely invaded by tumor cells. The mucosa (top of the picture) is practically intact. Inset shows tumor cells at high power magnification.

identity of the cell type and arrangement in both — the axillary nodes and the stomach — prove it.

Stomach carcinoma may cause early distant metastases via the thoracic duct. The supra-clavicular lymph nodes (Troisier's node) are well known. An early spread to the axilla is exceptional. It is remarkable that the primary tumor could not be located at once when the metastases appeared. The reason may be not only in the unusual microscopical structure of these metastases, but also because there were no symptoms referable to the abdomen or the stomach. More than a year elapsed after these metastases were removed, until the patient had symptoms of a stomach ailment. It seems that at the end a rather sudden and widespread abdominal dissemination of the cancer occurred.

BRONCHIAL CARCINOMA WITH UNUSUAL METASTASES

A white man, 55 years old, was admitted to the Chicago State Hospital on April 26, 1948. He had been a mental patient twice before, in

1945 and in 1946. He was diagnosed as a case of involutionary psychosis with depression.

A routine x-ray picture of the chest taken in August 1945 revealed several calcifications in both lungs indicating healed tuberculosis or fungus infection. Another one taken in October 1946 showed slightly enlarged hilar glands and an increased fibrosis in the right lung field suggestive of a fibrotic type of tuberculosis with little if any activity.

When admitted in 1948, the patient seemed to be confused and disturbed. Later he became more quiet, but was apathetic and indifferent.

It was said that he had convulsions before admission. However, no confirmation could be obtained.

Routine x-ray pictures of the chest taken in May and December 1948 revealed no essential changes as compared with the one taken in 1946.

However, as an active process in the lungs could not be excluded with certainty, the chest x-rays were repeated several times. In February 1949 some densities appeared in the left lung suggesting an activated tuberculosis. X-rays taken bimonthly showed increase and some spread of these densities and therefore a final diagnosis of pulmonary tuberculosis was made, although several sputum examinations were negative.

The patient expired on August 20, 1949, at the age of 57 years.

The main anatomical findings of the autopsy were: carcinoma of the upper lobe bronchus of the left lung; chronic interstitial (fibrotic) pneumonia of the left upper lobe; metastatic carcinoma of the skin, hilar lymph nodes, heart (epicardium, endocardium), spleen, liver, peritoneal lymph nodes, adrenals, kidneys, and brain.

There were ten subcutaneous nodes on the trunk, 0.5 to 2 cm. in diameter. They were encapsulated and movable. A surface made by cutting had white, hard, lobular and somewhat glistening tissue.

The left lung weighed 1100 gms. A hard grey tumor mass in the hilar region was 5 by 5 by 5 cms. It spread infiltrating and without definite borders into the upper lobe. The bronchus of this lobe was in the center of the tumor and its mucosa, which was smooth and pink in its proximal portion, became white and papillomatous in the region of the tumor. The



Figure 4. The left lung with the tumor. Note the meaty, fibrous appearance of the upper lobe.



Figure 5. Photomicrograph of the tumor, arising from the bronchus. The bronchial cartilage is preserved; the mucosa is replaced by tumor masses. Inset shows the "oat cells" of the tumor at high power magnification.

upper lobe was airless, firm, and had a meat like appearance. No nodes were found beside the main tumor.

The heart weighed 410 gms. There was a serofibrinous pericarditis. The epicardium, at the lateral border of the left ventricle, contained a flat tumor, 2 by 2 by 0.5 cms. It was adherent to the myocardium, but did not infiltrate deeply. The right ventricle contained a tumor node, 3 by 2.5 by 2 cms which was connected by a thin stalk with the endocardium. It was white, firm, and had a corrugated surface. The spleen had a tumor node, about 1 cm in diameter.

Many large metastases were in lymph nodes, in the liver, and in both kidneys. Both adrenals were changed into tumor masses, each measuring about 7 by 6 by 5 cm. No functional parenchyma was found in the gross specimen. The brain contained 7 metastases in both cerebral hemispheres and in the cerebellum. They varied in size from 1 to 3 cm. in diameter. One, in the cerebellar vermis, occluded almost completely the fourth ventricle. Another, in the right occipital lobe, had a recent hemorrhage.

Microscopical examination revealed an alveolar undifferentiated "oatcell" carcinoma. The tumor cells were uniform, spindle shaped and rather small. Mitotic figures were infrequent. The nodes of the skin had occasional giant cells with one large or several small nuclei. The endocardial metastasis had the same structure as the other tumor nodes.

COMMENT

Bronchial carcinoma was found in 11 of 540 autopsies during 4 years and 8 months at the Chicago State Hospital. This amounts to two percent in a series of postmortems performed upon people who almost exclusively were over 50 years old. Six, that is more than half of the cases, had brain metastases. Some of the patients were committed because the involvement of the central nervous system caused mental symptoms.

The case described above exhibits some unusual features. First, there were no metastases in the skeleton. They were not found at the autopsy nor were they visible in the x-ray pictures. If they had been present in the latter,

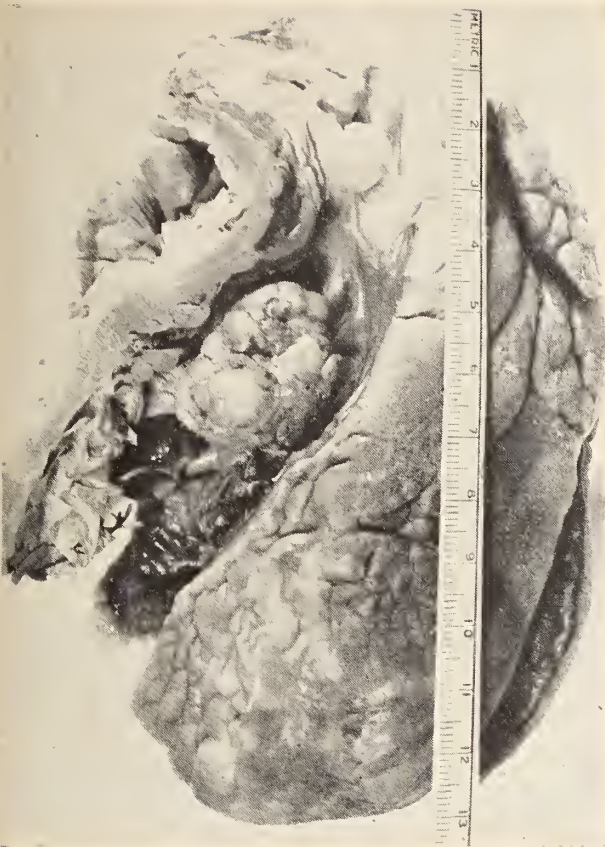


Figure 6. Heart with metastatic tumor node in the right ventricle.

the clinical diagnosis of pulmonary tuberculosis would have been changed. Second, of the metastases found in this case, those in the skin and in the spleen are rather uncommon. The endocardial metastasis is a rarity. Apparently, it did not cause clinical symptoms.

This case illustrates the difficulties encountered in making a clinical diagnosis upon mental patients who are uncooperative and frequently do not complain of physical discomfort. Proper specimens of sputum are often not obtainable and therefore a negative result of repeated examinations for tubercle bacilli is considered in a mental hospital as of less importance than in a general hospital.

Since, in this case, a number of routine x-ray films were made during four years before the patient expired, something can be said about the development of the cancer. A study of the films with the knowledge that there was a tumor, shows a shadow in the left hilum first visible in February 1949, six months before death. At this time the shadow which is spotted by calcified lymph nodes is hardly dense enough to suspect a tumor. Not before May 1949, that is four

months before death, had it increased in size to where a tumor might have been suspected.

ASTROBLASTOMA OF THE BRAIN WITH SUDDEN DEATH

A white woman, 46 years old, was found in a state of mental confusion at the Union Station in Chicago on March 8, 1949. Investigation by the Travellers Aid office revealed that she was en route from North Carolina to South Dakota. Further information was obtained from her children who stated that for some time she had been "nervous" and occasionally could not "concentrate". She had consulted a physician who attributed her complaints to "change of life". On admission to Chicago State Hospital, on March 16, 1949, the woman was still confused. Examination revealed an organic brain disease. There was aphasia, agnosia and apraxia, and also some paresis of the right extremities. The pupils reacted sluggishly to light. The optic discs were normal. The deep reflexes were exaggerated on both sides. The Babinski sign could not be elicited.

A tentative diagnosis of a neoplasm was made and surgery was considered. However, on April 2 the patient who seemed somewhat improved, had a severe epileptic convulsion and died suddenly.

The main finding at the autopsy was a large brain tumor. The tissues of the chest and of the abdomen had no pertinent pathology.

The dura matter was adherent loosely to the calvarium. It was tense and when opened, only a small amount of cerebrospinal fluid escaped. The brain was swollen: the convolutions were flattened and the sulci were narrow. The weight was 1350 gms. The basal arteries were soft. The left cerebral hemisphere was somewhat larger than the right one and its occipital pole was slightly fluctuant. In the left parieto-occipital region was a tumor 7 cm. long and 4 cm. wide. It was soft, yellowish with some focal hemorrhages, was located in the white matter and did not invade the cortex. The borders were ill defined. The brain substance was dry and a surface made by cutting was somewhat glistening, but not moist.

Microscopical examination of the tumor revealed a cellular astroblastoma. It had large foci of necrosis and hemorrhages.

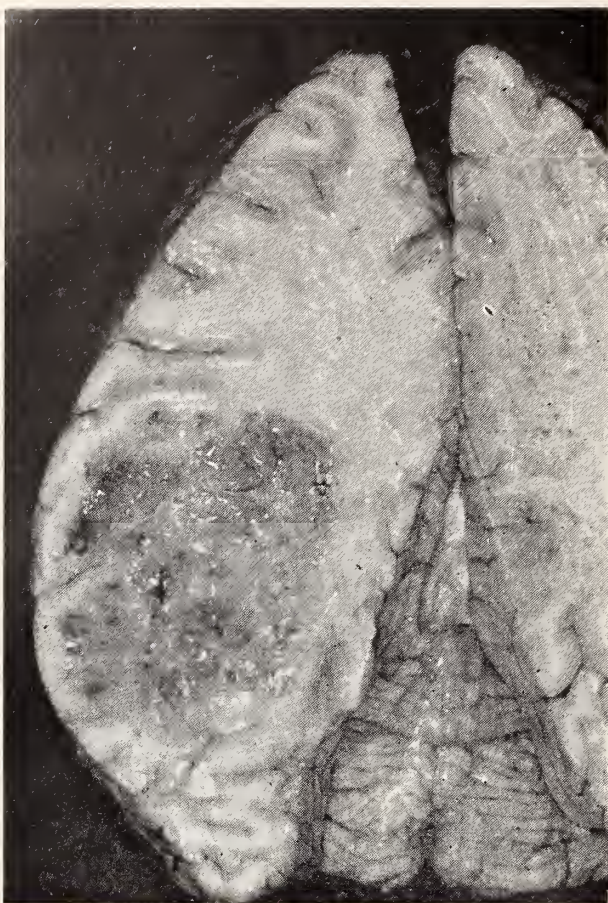


Figure 7. Photograph illustrating the glioma of the cerebrum.

COMMENT

The case, although not exceptional, illustrates the peculiar clinical course which a brain tumor may have. It is evident that the large glioma which was found at the autopsy, must have developed for months. However, the patient apparently had not been seriously ill until three weeks before death and had been able to travel by herself from North Carolina to Chicago.

The mechanism of the sudden death in such cases is not too well understood. The statement that the patient has died from a brain tumor covers the situation incompletely. The actual cause of the sudden death is not the tumor itself, but the swelling of the brain which must have developed rather suddenly. This "swelling" ("Hirnschwellung" of the German authors who first drew attention to it) is in my opinion not identical with edema of the brain. A "swollen" brain is dry and a surface made by cutting does not discharge any fluid; it is glistening and suggests the appearance of a gel with a high content of gelatin. An edematous brain is moist and a surface made by cutting discharges some fluid. It is likely that in the "swollen" brain the colloidal status of the nervous tissue has changed. The dynamics of such change which apparently may occur suddenly, are not known. However, it is the immediate cause of some acute brain deaths.

PARALYTIC ILEUS

The majority of cases of true paralytic ileus terminate in peritonitis and are usually classified and recorded as peritonitis. It is consequently impossible to obtain correct and complete case histories of true paralytic ileus. The predisposing factors, abdominal operation, peritonitis, ruptured viscus, torsion of any ovarian cyst: pneumonia, renal trauma, distended bladder are evidence that the real cause of ileus is not a local one. The mechanism is not clear. Extrinsic nerves play an important role in the

motor inhibition. The vagus is the motor nerve to the greater part of the intestine and the influences of the sympathetic are inhibitory to the bowel and motor sphincter. By shunting out the sympathetics, one can relieve paralytic ileus, and the intestine again contracts. The gut had not been paralyzed, literally speaking, but its activity was inhibited by the over-active sympathetic influence.

Excerpt, Paralytic Ileus, Gregory E. Stanbro, M.D., F.A.C.S., Oklahoma City, The Southern Surgeon, August, 1949.

NEWS OF THE STATE



BUREAU

Free Urinalysis.—The Bureau County Medical Society, at a recent meeting, voted to give any person wishing it a free urinalysis in its effort to cooperate in National Diabetic Detection Week, October 10-16.

COOK

Society News.—Dr. Philip Thorek addressed the Stephenson County Medical Society in Freeport, September 15, on "Vagotomy for Chronic, Non-specific, Ulcerative Colitis." On September 27, Dr. Thorek discussed "Achalasia of the Esophagus" before the Rock County Medical Society in Beloit, Wisconsin. Both presentations were illustrated with colored motion pictures.—"Association of Bronchial Infection with Pulmonary Emphysema" was the title of a talk by Dr. Edwin R. Levine before the annual meeting of the Rocky Mountain Chapter of the American College of Chest Physicians, September 20, in Denver, Colorado. Dr. Levine also participated in a symposium at this meeting on Fungus Diseases of the Chest.

Faculty Appointments.—The following appointments to the faculty of the Chicago Medical School were announced recently by Dr. John J. Sheinin, dean: In the department of medicine: Drs. Erwin Kammerling, Sherman R. Kaplan, Solomon L. Pearlman, Sylvan D. Solarz, Milton Wohl, Melvin Salk and Jerome Hirschmann, assistants in medicine; Dr. Meyer Steinberg, associate in medicine; Drs. Joseph C. Meyer and Irving H. Zitman, instructors in medicine. In the department of psychiatry: Dr. Walter Adams, associate in psychiatry and Dr. Meyer Kruglik, instructor in psychiatry. In the department of neurology: Dr. Herman Joseph,

associate professor of neurology. In the department of surgery: Dr. Milton A. Tinsley, associate professor of neurosurgery. In the department of anatomy: Dr. Harold Koenig, assistant professor of anatomy and Dr. Hans Elias, assistant professor of microscopic anatomy.

Edward Piszczek Named to New Post.—Dr. Edward A. Piszczek, director, Cook County Department of Public Health for the last nine years, has been appointed controller of the suburban Cook County tuberculosis sanitarium district, Dr. Jerome R. Head, president of the district's board of directors, announced recently. Dr. Piszczek, who is forty-one and who was instrumental in organizing the county's health department in 1940, took over his new post with the suburban tuberculosis district, November 1.

University News.—Glen W. Shols of Peoria has been awarded a Rachelle S. Yarros Scholarship for 1949-1950 by the University of Illinois College of Medicine, Dean John B. Youmans has announced.

Dr. Youmans reported that Shols has an average of 92 percent for this first year of medical studies, ranking at the top of his class of 166 students. Shols now is a second year student.

"Human Nutritional Requirements in the Light of Experience in the United Kingdom, 1939-1949" was discussed by Sir Jack Drummond, noted nutritional chemist and former member, Ministry of Foods, during an assembly hour at the University of Illinois College of Medicine, October 5. At a similar meeting, October 12, Dr. Van R. Potter, professor of oncology, University of Wisconsin, discussed "Enzyme Studies on the Cancer Problem."

Harry Hoffman Heads Mental Hygiene Unit.—

Dr. Harry R. Hoffman, formerly state alienist, has been appointed director of the city health department mental hygiene section. Dr. Hoffman is clinical associate professor of psychiatry at the University of Illinois, consultant on nervous and mental diseases at the House of Correction Hospital and senior consulting neurologist at the Norwegian American and Norwegian Deaconess Hospitals.

Dr. Oppenheim Honored.—Dr. Maurice Oppenheim, chairman of the department of syphilology and dermatology, The Chicago Medical School, was honored recently by the University of Vienna on the occasion of his fiftieth graduation anniversary. In a cablegram, the rector of the University extended congratulations on behalf of the institution and announced the resolution of the senate to renew his doctor's diploma. The "gold diploma" followed. Dr. Oppenheim was also invited to address a meeting of the German Dermatological Society held in Heidelberg in October. Dr. Oppenheim was head of the department of skin and venereal diseases at the Wilhelms-Hospital in Vienna for a number of years.

Grant For Research.—The Hektoen Institute for Medical Research of Cook County Hospital has allocated \$5,000 of its funds for the creation of a Dr. Ernst Loeffler Memorial Foundation to support research in honor of the recently deceased research associate of the Institute.

Personal.—Dr. Paul Hletko, chief medical officer, Illinois Department of Public Welfare, became executive officer in charge of the Illinois Neuropsychiatric Institute, September 1. He will continue in his other activities.—Dr. Louis B. Newman, chief of the physical medicine and rehabilitation service, Veterans Administration Hospital, Hines, addressed the American College of Hospital Administrators, September 15 during their 17th Chicago Institute which was held at the International House, University of Chicago campus. Dr. Newman gave an illustrated lecture on "Physical Medicine and Rehabilitation in the General Hospital."—Dr. Raymond W. McNealy, chief surgeon of Wesley Memorial Hospital, addressed the Chicago Methodist Preachers Association at the Chicago Methodist Temple, October 10 on "Present Day Europe as Seen Through the Eyes of a Surgeon."—Dr. Ralph Rudder was elected president of the Chicago Medical School Alumni Association at its recent annual meeting. Other newly elected officers include Dr. Sidney Bazzell, vice president; Dr. Henry DuVries, secretary and Dr. Irwin Blumenfeld, treasurer. The association has a membership of 1500.

Dr. Ivy Heads New Committee.—Dr. Andrew C. Ivy, vice president in charge of the professional colleges of the University of Illinois, was appointed chairman of a committee of twenty-two department representatives, medical experts and other scientists

organized to protect Chicago against the threat of biological warfare, according to the Chicago Tribune, October 7. The group is the first of its kind ever convened by any city in the world and was called together by Dr. Herman N. Bundesen, president, in headquarters of the health department at 54 West Hubbard Street.

New Lectureships Honor Physicians.—Twin lectureships in honor of Dr. Isaac Abt and Dr. Julius Hess were established by the Phi Delta Epsilon Medical Fraternity at Northwestern University Medical School and at the University of Illinois College of Medicine.

Dr. Sidney Farber, Boston, gave both the Abt Lecture and the Hess Lecture, speaking in the Archibald Church Library of Northwestern University, October 18, on "Cancer in Children: An Experimental Approach to Therapy" and at the University of Illinois, October 19, on "Cancer in Children: Life History and Biological Behavior." On the evening of October 18 a dinner was held in honor of Drs. Abt, Hess and Farber.

Research Seminar.—The Chicago Medical School conducted a research seminar September 21 with presentations by the following: S. Zalman, J. Handel, and J. A. Smith, "Studies on the Toxicity of Ergot Alkaloids"; P. H. Kopper, "An Antimalarial Substance from Cultures of a Creatinine Decomposing Strain of *Pseudomonas*"; S. J. Turner, "The Effect of Penicillin Vaginal Suppositories on Morbidity in Vaginal Hysterectomy and on the Vaginal Flora"; D. A. Wills, "Simplified Method for Localizing Radio-opaque Foreign Bodies in the Hand"; I. Davidsohn and C. Kashiwagi on "Recent Studies on Heterophilic Antibodies in Infectious Mononucleosis."

Mercy Hospital Reunion.—On October 22 a reunion of the internes and residents of Mercy Hospital was held at the John B. Murphy Memorial Amphitheatre at Mercy Hospital with Dr. Herbert E. Schmitz presiding as program chairman and Dr. John F. McNamara as moderator. Dr. Arkell M. Vaughn gave the presidential greetings. The Chicago speakers were Arthur W. Fleming, "Cerebral Palsy"; Robert F. Cummings, "The Differential Diagnosis of Acute Abdomen in Infants and Children"; Carlo Scuderi, "Bone Tumors"; John L. Keeley, "Eventration of the Diaphragm"; James X. Bremner, "Rupture of the Uterus" and Gilbert J. Thomas, Beverly Hills, California, "Carcinoma of the Urinary Bladder."

New Assistant Dean of Northwestern.—Appointment of Dr. Theodore R. Van Dellen, assistant professor of medicine, as Assistant Dean of the Medical School at Northwestern University was announced October 13 by President J. Roscoe Miller. Dr. Van Dellen succeeds Dr. George H. Gardner who resigned August 31.

Thirty-eight years of age and a graduate of Northwestern Medical School, Dr. Van Dellen is director of the Florsheim Heart clinic at the University.

The new Assistant Dean received his bachelor's and master's degrees from Northwestern and a medical degree in 1936. He served his internship at Wesley Memorial hospital in 1935 and residency at the New York Postgraduate Medical School and Hospital in 1936.

Dr. Van Dellen became an assistant professor of medicine at Northwestern in 1947. He is also associate editor of the Illinois Medical Journal.

President Miller also announced the appointment of Dr. Guy P. Youmans, professor of bacteriology, to be chairman of the Bacteriology department at the Medical School. Dr. Youmans succeeds Dr. Alexander A. Day who retired on Aug. 31.

The new chairman came to Northwestern in 1937 from the University of Washington where he received bachelor's and master's degrees and a doctor of philosophy degree in 1935. He obtained a medical degree from Northwestern in 1942.

Dr. Youmans is a member of the research and therapy committee of the American Trudeau project on tuberculosis.

Thirty members of the Medical School faculty have been appointed to the Medical Council for 1949-50, President Miller disclosed. Among those included are the following:

Drs. Leslie B. Arey, Lewis J. Pollock, N. C. Gilbert, Chester J. Farmer, Karl Meyer, Carl A. Dragstedt, Edward A. Oliver, Don C. Sutton, Frederick Christopher, Laurence E. Hines, Barry Anson, Paul S. Rhoads, Lowell D. Snorf, George H. Gardner, and Horace Magoun.

Also Drs. Vincent J. O'Connor, Loyal Davis, Derrick Vail, Harold A. Davenport, Michael Mason, Walter Maddock, John S. Gray, William Wartman, Smith Freeman, Howard S. Ballenger, John I. Brewer, Arthur Colwell, Edward L. Jenkinson, Dr. Youmans, and Dr. Van Dellen.

Visiting Professor at Chicago University.— Carl F. von Weizsäcker, German scientist who was the first to propose a detailed system of nuclear reactions to account for the source of energy in the sun and stars, arrived in Chicago October 3 to become the Alexander White visiting professor at the University of Chicago.

Arnold J. Toynbee, Reinhold Niebuhr, and Arnold Schönberg are among the distinguished men who have lectured at the Midway university as Alexander White visiting professors. Von Weizsäcker, a professor of physics at the University of Göttingen and at the Max Planck Institute, was a student of Nobel-prize-winner. W. Heisenberg was a member of the German University Commission set up to make suggestions for reform of universities in the British zone. He is the author of the University of Chicago Press fall publication, *The History of Nature*, and a second publication, *The World View of Physics*, translated by Marjorie Grene, will be forthcoming Press Book.

Ninetieth Anniversary Observed.—Dr. Richard H. Young, newly appointed dean of Northwestern Uni-

versity's Medical School, says that if schools of medicine are to continue to turn out good doctors they must teach their students to treat patients as living human beings rather than cases. "Impersonal medicine," he said, "is not good medicine, no matter how scientific."

Dean Young spoke in the Archibald Church Library on the Chicago campus to students and faculty of the Medical School, which observed its 90th anniversary, September 27.

Unique Research Project at Chicago.—Operation Catch, the University of Chicago basic research project in tuberculosis-like diseases, will extend its base this fall to include eleven southern Illinois colleges and high schools, Dr. William B. Beadenkopf, director of the student health services, announced October 13. A unit in the nation-wide cooperative program of skin testing and x-raying of young adult populations, Operation Catch (**Cal**cification, tuberculin, coccidioidin, and histoplasmin) is sponsored by the University of Chicago, the United States Public Health Service, and the Illinois Department of Public Health. Miniature x-rays and tuberculin and histoplasmin skin tests will be taken in 11 colleges and high schools in a study to determine the prevalence among students of tuberculosis-like diseases, especially histoplasmin.

A mobile x-ray unit, headed by Dr. Beadenkopf, Dr. Thomas Grayston, and Dr. Jeanne Ward of the University of Chicago Clinics, will be sent out from Chicago October 23 for a three-week program in southern Illinois. Emphasis in the survey will be placed on histoplasmin sensitivity. Colleges and schools in southern Illinois were chosen for the survey, for they are located in close proximity to the United States areas in which the highest rates of histoplasmosis and lung calcification occur.

On the southern Illinois trip, the University of Chicago staff of three doctors and two nurses will examine daily 500 students and faculty members who volunteer for the tests.

Itinerary of the mobile unit to the cooperating schools is as follows: October 24, McKendree College; 25, Carbondale Community high school and Southern Illinois University; 26, Greenville College; 28, Blackburn College; 31, Quincy College; November 1, Illinois College; 2, Decatur high school; 8, Carthage College; 11, Knox College; and 16, Eureka College.

DE KALB

Physician Honored.—Dr. John W. Ovitz, Sr., was guest of honor at a banquet given at the Kishwaukee Country Club, August 30, by the medical staff and friends of Sycamore Municipal Hospital, in recognition of his thirty years of service to Sycamore and the surrounding community. Dr. Paul W. Carney, president of the De Kalb County Medical Society, spoke on behalf of the society. Dr. Walter Stevenson, Quincy, President of the Illinois State Medical Society, was also present. Dr. Ovitz was presented with a check for \$500 to be used to fur-

nish a room in the Sycamore Municipal Hospital to be known as the Dr. Ovitz Room. He was also presented with a plaque expressing his services to the community.

GREENE

Society News.—Dr. Minot P. Fryer, St. Louis, addressed the Greene County Medical Society, September 9, in White Hall, on "Cancer" and Dr. Harry T. Mantz, Alton, on "Socialized Medicine."

LAKE

Society News.—Dr. Harry M. Hedge, President-Elect, Illinois State Medical Society, addressed a public meeting, October 5, under the auspices of the Waukegan Chamber of Commerce. His subject was "Socialized Medicine."

MARION

Personal.—Dr. Harry DeWitt Nesmith, Salem, a veteran of World War II, is the new national surgeon general of the Amvets, according to the *Centralia Sentinel*, September 8.

MARSHALL

Public Reception for Physician.—A public reception was held October 9 in the Mid-County unit auditorium in Varna to honor Dr. J. P. Johnson on his seventieth birthday. He was presented with a community gift.

MC HENRY

Personal.—Dr. J. H. Goodlad, a physician in Harvard for the past three years, was recently appointed to the fellowship staff of Mayo Clinic, Rochester, Minn. Dr. John J. O'Toole, Watertown, Wis., has taken over Dr. Goodlad's practice in Harvard at 38½ North Ayer.

MORGAN

New Superintendent of State Hospital.—Dr. Louis Belinson, Dixon, has been appointed superintendent of the Jacksonville State Hospital, succeeding Dr. James L. Smith, resigned. Dr. Belinson has been superintendent of the Dixon State Hospital for the past year.

Society News.—The Morgan County Tuberculosis Association was addressed recently by Dr. Loren L. Collins, medical director and superintendent, Madison County Sanitarium and Pleasant View, Edwardsville, on "Tuberculosis."—Dr. Andrew B. Jones, consultant psychiatrist, St. Louis City Hospital and assistant professor clinical neurology, Washington University School of Medicine, addressed the society, October 13, on "Spells, Faints and Convulsions."

PEORIA

Society News.—Dr. Milton G. Bohrod, Rochester, New York, addressed the Peoria Medical Society, October 18, at the Jefferson Hotel on "Pathology of the Allergic Diseases."

PERRY

Personal.—Dr. J. S. Templeton, Pinckneyville, has retired as Republican committeeman in precinct three after holding the position for forty-one years.

Dr. Templeton was first elected to a committee post in 1906 and with the exception of one two-year term has served continuously since that time. He has held the county chairmanship on several occasions and for a time was Republican state central committeeman from the 25th congressional district.

PIKE

Free Urine Tests.—The Pike-Calhoun County Medical Society recently voted to make free urinalysis for persons who request this service during National Diabetes Detection Week, October 10-16. At a meeting of the society, September 22, Dr. Hillard Shair, Quincy, spoke on "Conditions of the Skin."

ROCK ISLAND

Society News.—Dr. William Bean, head of the department of internal medicine, State University of Iowa College of Medicine, addressed the Rock Island County Medical Society recently at the East Moline State Hospital, on "Newer Concepts in Vitamin Therapy." Dr. Charles E. Mayos, former assistant superintendent at East Moline State Hospital, was given a life membership in the Rock Island County Medical Society at this meeting.

District Meeting.—The Iowa Illinois Central District Medical Association was addressed at Watch Tower Inn, Blackhawk Watch Tower, in Rock Island, September 28 by Dr. Danely Slaughter, on "Recent Advances in the Therapy in Cancer" and Dr. Walter L. Palmer, on "The Problem of Peptic Ulcer." Both speakers are of Chicago. The November 30 meeting will be addressed by Dr. Frank H. Bethell, Ann Arbor, Michigan, on "Advances in Hematology."

ST. CLAIR

Symposium on Obstetrics and Gynecology.—A symposium on obstetrics and gynecology sponsored by the St. Clair County Medical Society was held in East St. Louis, October 6. The afternoon program was held at St. Mary's Hospital and included the following Chicago speakers: Dr. Richard A. Lifvendahl, "Low Back Pain in Women"; Dr. Solomon J. Benensohn, "Ovarian Hormones in Obstetrics and Gynecology"; Dr. James P. FitzGibbons, "Infertility in the Female" and Dr. Rocco V. Lobraico, Jr., "Diagnosis and Treatment of Carcinoma of the Uterus." The guest speakers were introduced by Dr. W. C. Scrivner, East St. Louis. The afternoon program was followed by a round table discussion. The speaker at the evening dinner meeting was Dr. Herbert Gass, medical missionary from Baitalpurhandkuri, C. P. India, who presented a travelog. Dr. H. J. Nebel, president of the St. Clair Medical Society, presided at the dinner.

SANGAMON

Society News.—Dr. John S. Lundy, Rochester, Minnesota, discussed "The Present Status of Balanced Anesthesia and Supportive Therapy" before the Sangamon County Medical Society in Springfield, October 6.

STARK

Physician Honored.—Dr. Alma T. Wead, Wyoming, recently received the Fifty Year membership insignia indicating membership in the Fifty Year Club of the Illinois State Medical Society. Dr. Wead graduated at the Physician and Surgeon College, Keokuk, Iowa. She married a physician, Dr. James Wead and both practiced in West Jersey for about five years and then moved to Wyoming. Their oldest son, John T. Wead, is practicing in Wyoming and is associated with his mother.

WARREN

Dr. Hoyt Forms Partnership to Establish Clinic.—Dr. Lee T. Hoyt, Roseville, chosen in 1948 as the Outstanding General Practitioner in Illinois, has formed a partnership with Dr. Richard E. Icenogle to operate the Roseville Clinic, according to the Raritan Reporter, September 22. The physicians have taken the entire second floor of the State Bank Building in Roseville which gives them twelve rooms. Dr. Icenogle took his medical training at Eastern State Teachers College, Charleston, and graduated at the University of Illinois College of Medicine, Chicago, in 1946. He was a medical officer in the United States Army having been released from active duty on August 1.

WHITESIDE

Society Election.—Dr. Glenn Pohly, Sterling, was elected president of the Whiteside County Medical Society at a recent meeting, succeeding Dr. L. C. Johnson, Tampico, who has resigned.

WILLIAMSON

Society News.—Dr. W. I. Lewis, Herrin, addressed the Marion Business and Professional Woman's Club recently. His talk, based on his personal observations made during his recent visit to England, was titled "Socialized Medicine."

WINNEBAGO

Society News.—Dr. Nathan Womack, professor and head of the department of surgery, University of Iowa College of Medicine, Iowa City, addressed the Winnebago County Medical Society, October 11 at the Lafayette Hotel on "Benign Lesions of the Breast."

HEALTH DEPARTMENT ACTIVITIES

Cook County Report for 1948.—The Cook County Department of Public Health has recently made its complete report available for 1948. The illustrated booklet presents a statistical analysis of the communicable diseases that occurred in suburban Cook County.

GENERAL

Welfare Department Statistics.—The book population of all institutions July 31, 1949, was 54,368. This includes not only those present but also all patients in out-patient convalescent care. The resident population July 31, 1949, was 47,189, which excludes pupils from the Schools for the Blind and Deaf who were on summer vacation.

The greatest increase over July of last year was in the nine hospitals for the mentally ill, in which the population rose 555. During the month there were 990 admissions, 757 discharges and 353 deaths. Three hundred eighty-four patients were placed on conditional discharge and 44 in family care. There were 38,529 patients on books July 31, 1949.

The institutions for the mentally defective (Dixon State Hospital and Lincoln State School and Colony) showed an increase of 97 over the previous year. The resident population was 9,287, with 10,622 on the books.

There were 357 in Security Hospital July 31, 1949. Of this number, 278 were mentally ill, and 79 were mentally deficient.

At Neurosychiatric Institute, where most admissions are temporary for special treatment, 58 patients were present at the end of the month. Of this number 47 were admitted during the month.

Clinics for Trachoma Control and Prevention of Blindness in Southern Illinois treated 416 for trachoma, 60 for glaucoma, and 361 for other eye ailments. Nine patients were hospitalized for operations.

The Illinois Eye and Ear Infirmary received 7,920 patients in the clinic, and listed 18,452 treatments during July. Three hundred ninety-two were admitted to the hospital.

The Chicago Community Clinic reported 614 interviews during the month. Of this number, 598 were former patients in state hospitals—285 at Elgin, 201 at Manteno, 65 at Kankakee, 46 at Chicago and 1 at Dixon.

The Boy's Training School, Girl's Training School, and Women's Reformatory reported 904 juvenile delinquents, felons and misdemeanants present July 31, 1949. Fifty-eight were received from courts and 48 were discharged.

The pupils of the Schools for the Blind and the Deaf were on summer vacation. There were 56 children present at the Children's Hospital-School, with 92 on the books. At Soldier's and Sailor's Children's School 309 were present.

The Industrial Home for the Blind, Soldier's and Sailor's Home, and Soldier's Widows' Home reported 1,366 present July 31, 1949—an increase of 20 over one year ago.

The Veteran's Rehabilitation Center in Chicago, and Veteran clinics at Champaign and Rockford received 67 new cases during the month. The clinic at Aurora was closed July 1, thus no figures were available. There were 958 visits to the clinic in Chicago, 157 at Champaign, and 21 in Rockford. Since the opening of the Center, 5,514 veterans have received treatment at Chicago, 193 at Champaign, and 31 at Rockford.

The Division of Veteran's Service reported 2,995 veterans present in all Welfare institutions July 31, 1949. Of this number, 1,728 were World War I veterans and 711 were World War II veterans.

The Institute for Juvenile Research interviewed 130 new cases during the month. A total of 415 children and 451 adults were examined and received treatment.

The Division of Field Services reported 78 new parolees, 19 violators returned, and 38 discharged while on parole.

In addition, 1,238 patients were interviewed in outpatient psychiatric clinics, and there were 2,128 visits to the clinics during the month of July.

Besides the 47,189 persons housed in institutions July 31, 1949, 20,316 received treatment in the Department of Public Welfare clinics.

Dr. Slobe Named Assistant Director of Blue Cross Plan.—Dr. Frederick W. Slobe, Chicago, has been elected assistant director of the Illinois Blue Cross Plan for Hospital Care, it was announced recently. He will also serve as administrative director of the Medical department. Dr. Frank P. Hammond, who has served as medical director of the Blue Cross Plan for Hospital Care since 1939, will continue as medical adviser and consultant and will devote his attention to the increasing demands of the Blue Shield Plan for Medical Service.

DEATHS

Henry Sumner Bennett, Moline, who graduated at the University of Illinois College of Medicine in 1901, died September 25, aged 73; had practiced medicine in Moline nearly fifty years; was at one time member of the Moline board of education.

Frederick Egbert Bigelow, Chicago, who was graduated at Rush Medical College in 1897, died in the Illinois Central Hospital, July 5, aged 79.

Joseph Michael Blake, Moline, formerly of Chicago, who graduated at Rush Medical College in 1903, died October 1, aged 74. He was a resident physician at the Congress Hotel, Chicago, for 25 years.

Hada M. Carlson, Moline, who graduated at Keokuk Medical College, Keokuk, Iowa, in 1898, died September 10, aged 72. She was supreme physician of the Royal Neighbors of America for many years.

Lazarus N. Cohler, Chicago, who graduated at the University of Illinois College of Medicine in 1915, died July 27, aged 56.

Robey A. Crum, Mt. Vernon, who graduated at Chicago Medical School in 1933, died September 2, aged 48, of a heart attack. He served as Jefferson County physician for eight years and was past-president of the Jefferson-Hamilton County Medical Society.

Frederick Daird Culbertson, Rushville, who graduated at The Hahnemann Medical College and Hospital of Chicago in 1906, died September 7, aged 67 of a heart attack. He was founder and owner of the Culbertson Hospital in Rushville.

Ferdinand Edward Dostal, Chicago, who graduated at the College of Physicians and Surgeons of Chicago, School of Medicine of the University of Illinois, in 1905, died August 8, aged 67.

Clyde Earl Duncan, retired, Herrin, who graduated at Barnes Medical College, St. Louis, Mo., in 1911, died September 17, aged 60.

Jean du Plessis, retired, Chicago, who graduated at Loyola University School of Medicine in 1918, died September 8, aged 57.

Alfred Fred Eckert, Hecker, who graduated at St. Louis University School of Medicine in 1910, died September 20, aged 69.

James Louis Fleming, Chicago, who graduated at Rush Medical College in 1903, died October 5, aged 77. He was assistant professor of obstetrics at Loyola University School of Medicine and chief of the obstetrical department at St. Anne's Hospital.

Franklin Ernest Hall, Chicago, who graduated at Karl-Franzens-Universität Medizinische Fakultät, Graz, Germany, in 1919, died October 4, 1949, aged 54.

Sterling Perry Hart, Auburn, who graduated at Rush Medical College in 1900, died suddenly in his home, October 2, aged 73. He had practiced medicine in Auburn nearly 50 years.

William Shields Jones, Redmon, who graduated at Kentucky School of Medicine, Louisville, in 1893, died October 11, aged 86. He had practiced medicine over 50 years and was a minister of the Baptist church for 65 years.

Ernst Loeffler, Evanston, who graduated at Medizinische Fakultät der Universität, Wein, Germany, died September 24, aged 56.

William August Lottman, Olive Branch, who graduated at St. Louis College of Physicians and Surgeons in 1902, died September 2, aged 78.

Norman Edward Marion, Big Rock, who graduated at the University of Illinois College of Medicine in 1908, died in his summer home at Sturgeon Bay, Wisconsin, October 4, aged 64, of a heart attack.

John Alexander Ross, Wauconda, who graduated at Bennett College of Eclectic Medicine and Surgery in 1909, died October 4, aged 73.

William Christopher Schiele, Galena, who graduated at the University of Illinois College of Medicine in 1912, died September 1, aged 62. He was president of the Galena Board of Education for 15 years, and on the staff of Mercy and Finley Hospitals in Dubuque, Iowa.

George Albert Sollis, Herrick, who graduated at Barnes Medical College, St. Louis, Mo., in 1908, died recently, aged 68.

Perry Houston Stoops, retired, Ipava, who graduated at Rush Medical College in 1886, died September 14, aged 86. He was a past president of Fulton County Medical Society.

Albert Franklin Turner, Taylorville, who graduated at Barnes Medical College, St. Louis, Mo., in 1905, died September 28, aged 77, after a lingering illness.

Howard Eliphalet Wharff, Edwardsville, who graduated at St. Louis University School of Medicine in 1906, died suddenly in his office, September 14, aged 71.

George Augustus Yaeger, Chicago, who graduated at Rush Medical College in 1885, died June 22, aged 82, of bronchopneumonia.

John Glenn Young, Pontiac, who graduated at

Barnes Medical College, St. Louis, Mo., in 1906, died September 5, aged 70. He was a member of the Pontiac Board of Health, and chief surgeon at the Pontiac prison.

“For The Common Good”

Health Talk Televised on WGN-TV.—During October, the weekly telecast, entitled Health Talk, presented by the Educational Committee of the Illinois State Medical Society, included the following: October 5.

Robert S. Berghoff and Theodore R. Van Dellen, What Is Heart Disease. The telecast covered an explanation of the various types of heart disease, with a heart model and blackboard sketches being used to classify the action of the heart under normal and abnormal conditions; an electrocardiographic tracing was taken of a patient with a normal heart, and other tracings were shown to demonstrate the purpose of this procedure. The equipment used on the telecast was made available through the courtesy of the Cambridge Instrument Company.

Coye C. Mason, Dr. Van Dellen, James Lee, and Miss Dorothy Pinkham, technician, What is Pathology? October 12.

This telecast was a simulated hospital office and laboratory of the pathologist; it showed the routine work of the pathologist, and included the step by step procedure of the immediate tissue examination of a suspicious lesion of the breast. The telecast emphasized the need of careful records kept by the pathologist as well as the benefits derived by the performance of an autopsy.

Paul Campbell and Dr. Van Dellen, Dizziness, October 19.

With models, charts and other visual material, this telecast explained many of the reasons for dizziness; the necessity for establishing an accurate diagnosis through the teamwork of the general practitioner, the otolaryngologist, the internist, the neurologist and frequently other specialists.

Lectures Arranged Through the Educational Committee of the Illinois State Medical Society:

Arthur Rosenblum, Chicago, Forest Ridge Woman's Club in Oak Forest, October 19, Trying to Understand the Adolescent.

Ralph Hamill, Chicago, Brookfield Woman's Club, October 19, on Growing Old Gracefully.

Robert Mustell, Chicago, Summer School PTA in Chicago, October 19, on Cancer.

W. W. Bolton, Chicago, Mark Sheridan PTA, October 20, on Health of the School Child.

Stanley C. Stanmar, La Salle, Sandwich Woman's Club in Sandwich, November 7, on Growing Old Gracefully.

George A. Wiltrakis, Mental Hygiene Division, Illinois Federation of Woman's Clubs in Chicago, November 14, Activities, Needs and Resources of a State Hospital.

Joseph T. O'Neill, Ottawa PTA, November 28, on vember 17, on Child Health.

Theodore R. Van Dellen, Woman's Auxiliary, West Side Branch of the Chicago Medical Society, November 18, Television Medicine.

William Raycraft, Oak Park, Rivert Grove PTA in River Grove, November 21, As the Twig is Bent.

Joseph T. O'Neill, Ottawa PTA, November 28, on Communicable Diseases.

Edwin R. Levine, Chicago, Toman Library Forum in Chicago, December 9, on “Man's Great Enemy—Tuberculosis.”

Edward A. Piszczek, Chicago, AF Ames PTA in Riverside, December 13, on Advances in Medicine.

Lectures Arranged Through the Scientific Service Committee of the Illinois State Medical Society:

Paul Hletko, Chicago, Kankakee County Medical Society, in Kankakee, October 11, on What the Physician Should Know About Mental Disease.

Eugene A. Hamilton, Chicago, Rock Island County Medical Society in Rock Island, October 11, on Care of Fractures by the General Practitioner.

Harold M. Camp, Monmouth, Kane County Medical Society in Aurora, October 12, on The Fight Is Not Over.

John A. Mart, Chicago, and David B. Freeman, Moline, Warren County Medical Society in Monmouth, October 13, on Newer Concepts in Diagnosis and Treatment of Coronary Disease and The English G.P. Under Nationalized Medicine, respectively.

C. Edward Stepan, Chicago, McHenry County Medical Society in Crystal Lake, October 20, Rheumatic Fever: Its Possible Etiology and Therapy.

Jules Masserman, Chicago Oral Surgery Society, November 4, on Emotional Problems in Oral Surgery.

Clayton G. Loosli, Chicago, Kankakee County Medical Society in Kankakee, November 8, on Problem of Treatment and Control of Respiratory Infections, illustrated.

George H. Woodruff, Joliet, Fulton County Medical Society in Canton, November 10, Recent Trends in Otolaryngology.

Louis R. Limarzi, Chicago, Six County Medical Society in Herrin, November 17, on Anemias, Blood Dyscrasias.

Charles J. Smith, Chicago, McHenry County Medical Society in Crystal Lake, November 17, on Rh Factor in Obstetrics.

Ralph A. Reis, Chicago, La Salle County Medical Society in La Salle, December 8, on Toxemias in Pregnancy.

D. W. McKinney, Ottawa, Iroquois County Medical Society in Watseka, December 20, on Pre and Postoperative Therapy.

Edward L. Compere, Chicago, Macon County Medical Society in Decatur, December 20, on Treatment of Fractures of the Hip, illustrated.

Graduate Conference for Mattoon.—A postgraduate conference was arranged for the Eighth Councilor District of the Illinois State Medical Society at the

Masonic Temple, Mattoon, October 20 with Dr. Joseph J. Link, Mattoon, presiding. The session opened with a luncheon, after which the following spoke:

Samuel M. Feinberg, Chicago, Management of Asthma in General Practice.

James H. Hutton, Chicago, Hypertension.

E. Lee Dorsett, St. Louis, Eclampsia.

John T. Reynolds, Chicago, Abdominal Surgery.

A roundtable discussion concluded the afternoon program. In the evening, following a social hour and dinner, Eric Oldberg, Chicago, presented an illustrated address in Cerebral Angiography.

This conference was one in the twelve authorized by the Council of the Illinois State Medical Society for the 1949-1950 season. The choice of program is always left to a local committee, but the conferences are arranged through the Postgraduate Education Committee of the State Medical Society, of which Robert S. Berghoff and George Hellmuth, both of Chicago, are chairman and vice chairman, respectively.

FIND STREPTOMYCIN EFFECTIVE AGAINST BACILLARY DYSENTERY

Treatment of shigellosis, a major form of bacillary dysentery, with streptomycin produces prompt relief from the disease, according to a study made by five Washington, D. C., physicians under a grant from the U. S. Public Health Service.

Writing in the Sept. 17 Journal of the American Medical Association, Drs. Sidney Ross, Frederic G. Burke, E. Clarence Rice, Harold Bischoff, and John A. Washington say that lowering of temperature and reduction in diarrhea usually occurred in acutely ill patients in 12 to 24 hours after oral streptomycin therapy was begun.

All 34 patients treated with streptomycin were children, ranging in age from three months to 12 years. All had an uneventful recovery from the disease except five patients who had either a relapse or a reinfection within one month after discharge from the hospital, the doctors say, adding:

"It would require a larger series than ours to state that streptomycin is superior to sulfadiazine (in treating this kind of bacillary dysentery). However, oral administration of streptomycin could be used advantageously in patients with a sulfoamide-resistant strain of organisms as well as in those cases in which there exists a sensitivity to sulfonamide compounds.

"One may take cognizance of the relatively higher incidence of shigellosis in military personnel, especially in the tropical areas, coupled with the frequent hazard

of administering a sulfonamide drug to dehydrated patients. In these conditions, orally administered streptomycin may be found to be of considerable use as a substitute drug."

NEW TYPE OF INSULIN AIDS DIABETICS

A long-acting insulin which reduces the number of injections needed by diabetics had been developed, according to an article in the Oct. 1 Journal of the American Medical Association.

Duration of blood sugar lowering action of the new modified protamine insulin (NPH-50) is 28 to 30 hours, while that of other kinds of insulin is six, eight, 15 and 72 hours, says Dr. Priscilla White of Boston.

In 95 per cent of the 336 persons with severe diabetes to whom the new insulin was administered, results were as successful as, if not more so, than those from separate injections of crystalline and protamine zinc insulin, Dr. White reports.

In 5 per cent of the group, a single injection of the new insulin was less successful in controlling diabetes than were separate injections of these two insulins. These failures included insulin-sensitive adults, diabetic children under five years of age, and patients whose requirements for long-acting insulin were small compared with their requirements for quick-acting insulin.

Regulation of diet and exercise is a necessary adjunct to treatment with the new insulin, Dr. White points out.

The

ILLINOIS

Medical Journal

Official Journal of the Illinois State Medical Society

Harold M. Camp, EDITOR.

Theodore R. Van Dellen, ASSOCIATE EDITOR.

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Vol. 96, No. 6



December, 1949

ANDY HALL — OUTSTANDING GENERAL PRACTITIONER

On Sunday, October 30, a special secret committee carefully considered twenty two applicants for the designation as outstanding general practitioner for the State of Illinois. Andy Hall of Mt. Vernon was selected for this honor. Doctor Hall will be the Illinois candidate to be presented to the A. M. A. House of Delegates at the interim session to be held in Washington, December 6-9. He will also be given signal honors at the 1950 annual meeting of the Illinois State Medical Society which will be held in Springfield, May 23-25.

Andy Hall, the son of Colonel Hiron W. and Julia McLean Hall, was born on a farm in Hamilton County, Illinois, January 8, 1865. His father served in the Mexican War, and commanded an Illinois regiment during the Civil War. His mother's family gave to Illinois the United States Senator after whom McLean County was named. He was the eighth child in a family of nine. His early education was obtained in a one room, log school house, later in the McLeansboro public schools, the Northern Illinois Normal and Dixon Business College.

He entered the Medical School of Northwestern University, from which institution he was graduated in 1890. Following graduation, he located at Mt. Vernon, where he has resided

since, and has enjoyed a very extensive practice throughout the years. He was truly a horse and buggy doctor, and when road conditions were such that the use of a buggy was impossible, he rode on a horse, and even made many calls in bad weather on foot. On one occasion he walked more than 30 miles in one day making his city and country calls.

On January 1, 1892, Doctor Hall was united in marriage to Miss Anna Laura Glazebrook, who was then a teacher in the Mt. Vernon public schools. To this union three sons were born, all of whom are physicians. Doctor Hall was elected mayor of Mt. Vernon in 1897, but when the Spanish American War was declared in 1898, he resigned as mayor, and entered the medical corps of the United States Army, serving as Major and Surgeon in the 9th Illinois Cavalry, accompanying that unit to Cuba. When he was mustered out, he again returned to his practice in Mt. Vernon.

Five weeks later he received a telegram from the Surgeon General requesting him to accompany the volunteer Army to the Philippine Islands during the insurrection. Leaving Mrs. Hall, a three year old son and the eleven months old baby, he again closed his office and started for Manila. He remained in service until 1901, when he again reopened the office in Mt. Vernon. Two years later, a nephew, Dr. Charles W. Hall,

formed a partnership with him, which continued for 36 years.

When World War I was declared, both Dr. Andy and Dr. Charles volunteered, closed their office and entered the Medical Corps of the United States Army. He was assigned to duty at the Base Hospital at Camp Upton, where he remained on the surgical staff until the Armistice was signed. Doctor Hall returned to Mt. Vernon where he alone worked for one year until the nephew returned from Europe, and the old partnership was resumed. Later, Doctor Hall's son, Marshall W. Hall, joined them, and under the name of Hall, Hall, and Hall, they built up a lucrative general, surgical and obstetrical practice.

In 1929 Doctor Hall was appointed Director of the Illinois Department of Public Health, he being the first "down-state" physician to be so honored. For four years he devoted full time in the effort to give the State of Illinois the best health record ever recorded to that time. During his administration the State Sanitary Water Board came into existence, and the Health Department was given supervisory powers over public water supply and sewage disposal systems. Other laws for which he aided in their promotion were those clarifying the duties of coroner in regard to the signing of death certificates, and raising the standards of public health nurses.

He also initiated two important projects relative to trachoma and undulant fever. A searching survey elicited the information that there were more than 400 active cases of trachoma in Southern Illinois, and more than 200 of these were hospitalized in the effort to save their vision and restore their health. A state committee was appointed to combat the threatening rise of undulant fever, and a program based upon a detailed epidemiological study of the disease in Illinois was instituted. During his term as Director of the Department of Public Health, Doctor Hall delivered between 400 and 500 public addresses in all parts of the state.

In 1933 Doctor Hall resigned as Director of the Department of Public Health, and returned to Mt. Vernon, and again became the head of the "Hall, Hall and Hall" office. In 1939 Dr. Charles W. Hall's health was impaired, and he withdrew from the firm. When World War II was declared, Dr. Marshall Hall volunteered, and entered the Medical Corps of the U. S. Navy,



Andy Hall

serving 3½ years in the Mediterranean and African campaigns and then in the Pacific. He was discharged at the end of the war with the rank of Commander. During this period, the firm of "Hall, Hall and Hall" was reduced to one, Doctor Andy carrying on in the large office, which formerly had three physicians. He was chairman of the Medical Board of Appeals for the 29th District, taking time out for this important function.

In 1946 Doctor Hall was given the Mt. Vernon Civic Award, for "Outstanding and Distinguished Community Service". He was always interested in medical society work, and for many years was secretary of the Jefferson-Hamilton County Medical Society. He actually missed only two annual meetings of his state medical society in more than 40 years and only because he was in service during the wars. For 19 years he was a member of the Council of the Illinois State Medical Society, and on several occasions refused to consider higher offices within the Society, which he could unquestionably have had, if he desired them.

He was the first, and to now, the only chairman of the Fifty Year Club Committee, and he

has personally presented many dozens of the certificates and emblems to men who have completed fifty years of service, and have been inducted into the Society's Fifty Year Club. Since the beginning of this interesting work more than 11 years ago, there have been 650 Illinois physicians so honored. This being a pioneer venture on the part of the state medical society, during the past two or three years, quite a number of other state societies have been similarly honoring their members who have completed fifty years of practice. The annual luncheon meeting of this club is always conducted under the sponsorship of Doctor Hall.

Doctor Hall was president of the Mt. Vernon Township High School Board for eight years, and has been intensely interested in all educational endeavors. He is a Fellow of the A. M. A., charter member of the American Legion, member of the Illinois State Medical Society, the Veterans of Foreign Wars, and is now the Department Surgeon of the United Spanish American Wars Veterans. He is a Baptist, and a Mason, being a Knight Templar.

Doctor Hall's three sons are all physicians. Dr. Marshall is associated with his father, Dr. Andy Jr. is a "G. U." specialist in St. Louis, and Dr. Wilfred a Colonel in the Regular Army, and a Flight Surgeon in the United States Air Corps. Although nearly 85, Dr. Hall is still carrying on, and has no intention of retiring, his interests still being in the general practice of medicine in addition to his work in industrial medicine and surgery. He drives his own car daily, and still is willing to make night calls. He rarely takes a vacation, but is a firm believer in hobbies, and during the quail season, with his dog tramps the hills and hollows seeking that wary bird, and frequently has but little difficulty in getting the legal limit. He is also a confirmed fisherman, and can be found on the banks of a stream in season, with his rod and reel, or in a boat on a lake where he can find bass or crappies.

The Illinois State Medical Society has selected a man who is eminently qualified as its outstanding general practitioner, and has submitted his name to the American Medical Association as the Illinois candidate for the national honor.

THE A. M. A. INVESTIGATION

In October the Board of Trustees of the American Medical Association issued an interesting statement, which went immediately to all state medical societies, and was later published in the J. A. M. A. Since this release was sent out, we were informed that some six other medical societies had been added to the list of those to be investigated, and perhaps at this time some others have been informed that their activities will be likewise investigated. The release from the A. M. A. is as follows:

"The Board of Trustees of the American Medical Association today issued a public statement protesting the use of a police arm of the government — namely the anti-trust division of the Department of Justice — in a campaign to discredit American medicine and terrorize physicians into abandoning their opposition to compulsory health insurance.

The statement revealed that 16 state and county medical societies, and other medical organizations, including the A. M. A. itself, have been made the targets for investigations by the anti-trust division of the Justice Department during the past 30 days.

The medical groups suddenly brought under investigation, it was announced, include the following:

American Medical Association, New York State Medical Society, Utah State Medical Association, Washington State Medical Society, Arkansas Medical Society and the Oklahoma State Medical Association, Michigan Medical Service, a Blue Shield Prepaid Medical Care Plan, and the Arkansas Blue Cross Shield Plan, Los Angeles County Medical Society, California, Beckham County Medical Society, Oklahoma, Wayne County Medical Society, Michigan, Harris County Medical Society, Texas, King County Medical Society, Washington, and the New York County Nassau County and Queens County Medical Societies in New York State.

The A. M. A. Statement follows:

"This is an official statement of the Board of Trustees of the American Medical Association, protesting the use of a police arm of the government — namely, the Anti-Trust Division of the Department of Justice — in a campaign to discredit American Medicine and terrorize physi-

cians into abandoning their opposition to compulsory health insurance.

"The A. M. A. has opened its records to the Justice Department, without reservation, and medical societies throughout the country undoubtedly will do likewise, but we intend to keep the public fully informed of developments, as we are convinced that these are not bona fide anti-trust investigations, and that the American people will not tolerate police state methods in this country.

"We would be naive, indeed, if we ignored the political implications of this sudden rush of investigations, attacking medical societies, at a time when the administration is doing its utmost to stifle opposition to its proposed system of government-controlled medical care.

"This scheme, it is specifically provided, would be a government monopoly, to which every citizen would be compelled to contribute, and which would destroy all the hundreds of voluntary health insurance systems which now provide prepaid health care for more than 61,000,000 of the American people.

"Certainly it will be a travesty on justice if the Anti-Trust Division of the Department of Justice can be used to silence opposition to the creation of a government-trust in medicine.

"The American people, we believe, will hardly think it a coincidence that these anti-trust investigations should be ordered at this time — after there have been repeated threats that medical groups would be 'investigated' because of their opposition to socialized medicine.

"The chronology of events, since the American Medical Association decided to make a nationwide campaign against compulsory health insurance, and in behalf of voluntary health insurance, is, we believe, of real significance.

"In November, 1948, the A. M. A. at its mid-winter meeting voted to collect funds from its members to finance a campaign of public education on this issue. A public announcement was made to that effect.

"Only a month later, in December, agents of the Department of Justice called on the Chicago Medical Society, seeking to check the Society's records in connection with an alleged anti-trust investigation.

"During the February session of the Board of Trustees of A. M. A. in the early hours of February 10, the board room was broken into

and records of the Board were thoroughly searched by persons unknown. Brief cases of the trustees, left in the room, were also searched. Entrance was gained through a window. The facts indicate this was a search for information, rather than an ordinary burglary. Certainly no friends of medicine would take this means of obtaining medical data.

"A few weeks later, toward the end of February, administration leaders began threatening medical societies and medical men with 'investigation' as part of their campaign to discredit and intimidate the medical profession. Since then, there hasn't even been much attempt to disclaim the political nature of these investigations.

"On February 28, 1949, for example, one of the national press associations carried a dispatch from Washington quoting government officials as stating that anti-trust actions would be started against 'several' medical societies soon after the compulsory health insurance drive was started in Congress.

"The implication was plain that the 'investigation' would be part of the administration's campaign for its socialized medicine scheme.

"The threats made then are now realities. An epidemic of 'investigations' aimed at medical societies and voluntary medical care plans, has broken out in widely separated states and cities all over the country.

"We want it clearly understood that we believe this attack on the medical profession stems from the Anti-Trust Division of the Justice Department and political string-pullers who have exerted influence on that agency. We believe it to be an outrageous abuse of public power which far transcends in gravity the issue of compulsory health insurance, vital as that issue is.

We recognize that politically-motivated attacks have been made on many other groups by this division of the government, and we invite their cooperation with American medicine in an effort to alert the American people to the seriousness of this trend toward police state methods. If the police arm of the government is used to intimidate doctors and others, and this abuse of power goes unchallenged, it may next be used to terrorize publishers or grocers, farmers or lawyers, Catholics, or Jews, or any other minority in the nation."

It is quite obvious that these investigations will not terrorize physicians throughout the country into abandoning their opposition to compulsory health insurance. Since the release was issued in October, there have been literally hundreds of news paper editorials and articles, calling attention to their readers of this movement on the part of the Department of Justice, and most likely the reactions have in a way been responsible for many American people in their respective home communities to have a different attitude concerning the work of American physicians and their many efforts to aid suffering humanity in times of sickness or accident.

"BY APPOINTMENT ONLY"

Keeping office hours is an important part of the practice of medicine. They can be pleasant when well organized and hectic when everything is in a state of confusion. It is needless to say that better work is accomplished when everything is running smoothly. This is important in this day and age when the medical profession is being scrutinized as never before.

Opinions vary as to the relative merits of taking each patient in turn or by appointment only. Many physicians selected the appointment system on the theory that it adds prestige without realizing that they might do better if they used the other method. It means working on a rigid schedule and those who do not have the ability or inclination to do this will do better work if they abandon the idea. In other words, the type of office hours depends to a great extent upon the personality of the physician and not his type of practice.

There are many advantages to the appointment system. The patients are spaced to avoid waiting and the physician knows in advance how much work lies ahead. It also helps during vacation periods and when time off is needed for conventions. It is indispensable for those who allow an hour for each consultation and for those with a small practice who have outside work to do.

But these advantages are offset easily by several uncontrollable factors. A short visit puts the physician ahead but after a long consultation he is behind. The schedule also is upset by emergencies and by those who "sneak" in to ask one question but stay long enough to discuss a dozen. Sooner or later the appointments lag behind; the physician is upset and so are the patients. To

wait an hour to see a physician is not unusual but to wait an hour after making an appointment is another matter. It ends so often with no one taking appointments seriously.

In our opinion, the appointment system should be selected if the physician can work on schedule; otherwise, he should just hold hours. A decision is in order because it leads to the practice of better medicine.

HOW BROAD THE CARDIAC'S HORIZON?

The long range outlook and the prospects of a useful and livable existence for individuals with heart disease, irrespective of type, has changed amazingly in the past two decades — and changed for the better!

The explanation for this desideratum is probably a combination of earlier and better diagnosis, new and more effective therapy, and finally the judicious readjustment of cardiacs to a twentieth century world.

To mention only a few of the more common forms of heart disease in chronological order which have either become "reversible" or at least rendered compatible with life and living, we must begin with the congenital types, some of which are now being completely corrected surgically.

Rheumatic heart disease, while certainly not on the decrease, is being treated more adequately than in the past, and accordingly the end results are more favorable. It is interesting to note in this respect that just recently, committee appointed by the Chicago Heart Association recommended that children with compensated rheumatic hearts can probably be as adequately taken care of in the special rooms of the general schools of the Chicago Public School System with a bit more supervision than, as previously, in special cardiac schools. Children with rheumatic heart disease, at least the greater percentage of them, with carefully moderated lives, can now look forward to maturity, and even senility.

Acute and subacute bacterial endocarditis, which a few short years ago, were synonymous with a most unfavorable and limited "outlook" and a high mortality rate, are not found to respond satisfactorily to prodigious and sustained dosages of penicillin.

Auricular fibrillation only a few years ago was considered an acute phase of heart muscle decompensation. We now look upon it as chronic

or long termed. If due to an hyper active thyroid influence, the management is simple, and frequently reversible; if on the other hand it is part and parcel of senile cardiac changes, it too is commonly brought under control with proper therapy and management, so that the "horizon" for this vast horde of cardiacs has been broadened materially.

Syphilitic heart disease deserves a brief mention. Due to earlier diagnosis and more effective treatment of syphilis in its primary stage, we now encounter syphilitic heart disease much less frequently. It is relatively rare, as a matter of fact, to find a syphilitic aneurysm.

We are told, and it is roughly true, that approximately two out of five people in the old age group, that is, in the seventh, eighth and ninth decades of life, die of arteriosclerotic coronary disease. It is a fact that heart disease is by far the most common of all terminal diseases. This is understandable. Human life is growing longer and longer, and human beings are growing woefully old, and the one organ most commonly responsible for their ultimate end is the heart.

And yet it is in this very type of heart disease that the cardiac's horizon has broadened so tremendously in the past few decades. In the first place, we no longer believe the individual with angina pectoris is having pain or distress due to a spasm of his coronary vessels, but we are convinced the mechanism and background for this coronary complex is definite coronary pathology. Accordingly, this type of patient is now being treated more sanely and adequately, resulting in a markedly decreased mortality rate. As for the individual with acute coronary occlusion with massive infarction, his mortality rate and his life's expectancy have been altered radically.

The vast majority of people with acute coronary occlusion with infarction, if diagnosed early, and treated adequately, are rehabilitated and returned to a useful existence. The outlook for old people with acute and chronic coronary disease is improving constantly, so that the cardiac's horizon has been broadened to a degree constituting in the not too distant future an economic and social problem.

Robert S. Berghoff, M. D.
Clinical Professor of Medicine,
Stritch School of Medicine of
Loyola University

THE DOCTOR LOOKS IN THE MIRROR

Times have changed, they say, in the care and treatment of the sick. Indeed they have, Doctor: this has been a great era in medicine. Life's span has increased thirty years since you started practice, many wonder drugs have been discovered and many diseases have been removed from the class of incurables. Hospitals, magnificent in architecture, have been constructed and the departments there in are scientific to the Nth degree. Scholastically requirements for oncoming doctors have been steadily increased for the public good. Through it all the ideals of the profession have never wavered and still remain as of old: what can I do to alleviate the pain and suffering of humanity? Because of the steady progress in the field of medicine and because the attitude of the profession has remained unchanged in the field of its fundamental ideals more people have recourse to and receive good scientific medical treatment than ever before in the history of man. In this, my country, medicine has gained a stature beyond comparison in the world.

Why then this tumult of criticism of my profession? Why the hue and cry of an unsatisfied minority for the destruction of the present House of Medicine? What have I done to deserve this treatment? What have I left undone to merit this castigation? Is it that I do not give my patients enough attention? Are my charges exorbitant? I can answer these questions in the negative. What then can be the reason? I think, Doctor, that my fellow practitioners and I have kept abreast in our chosen profession but we have allowed the rest of the world to pass us by. How about our interest in civic problems? What do we do about fulfilling our obligations in the field of politics? Are we interested and informed in the field of labor relations? What concern have we shown in the problems of the farmer? Have I listened to the leaders of my county, state, and national medical organizations in their suggestions as to the best means of combating compulsory health insurance or have I said "Let George do it."? Hitherto I have prided myself on my individualism, it seems a natural impulse for physicians to be individualistic without giving thought to the potentialities of the group to which they belong. Proponents of government

medicine are aware of this and find it useful in their attempts to take over the field of healing.

What have I done about promoting good public relations? Unless I become a vital force in my community I shall definitely lose my cherished individualism within the next several years. Our public relations have been woefully inadequate and in some instances decidedly childish. I stress public relations for the reason that I have done so little to maintain a pleasant, wholesome relationship with my fellowman but have remained complacent in my ivory tower where I have devoted myself to the scientific aspects of my profession and closed my eyes to the demands of the whole man. I have assumed that the world will continue to pay homage to my profession despite my failure to share in the obligations imposed on all citizens of a free country. I seem blind to the fact that other agencies such as insurance companies, labor unions, and cooperatives have been pre-empting for themselves more and more of my domain. I have been oblivious to the fact that the public, over a period of years, has been skillfully propagandized to question the integrity and ability of the very men who have devoted their lives to making this the healthiest nation in the world. Even our severest critics concede that in times of crisis the doctor gives freely and selflessly of his time, learning, and strength, therefore I must as honestly admit that outside my chosen field of medicine I can be easily imposed upon. If I expect to continue the practice of medicine unhampered by political administrators I will have to come out of my ivory tower, scrap my aloofness and fight for the things I believe in. If I desire freedom I must be willing to struggle for it, I must become militant for the good of the humanity I have sworn to serve.

Robert E. Fitzgerald, M.D., Milwaukee, Wis., as published in the *Wisconsin State Medical Journal*.

Tuberculosis is preventable and eradicable. In the United States it causes one death every nine minutes. Illinois needs 3000 additional sanitarium beds.

INTER-PROFESSIONAL DINNER AND FORUM

The Education Committee of the Rock Island County Medical Society sponsored an unusually interesting dinner meeting, which was held at the Fort Armstrong Hotel, Rock Island, Friday evening, November 11. With 180 present, there were representatives of many groups — the clergy, bar, the dental society, hospital administrators, educational system, organized labor, pharmacists, insurance, the press and radio, chiropodists, Chamber of Commerce, morticians, veterinarians, associated industries, nurses alumni association, Farm Bureau, P. T. A., Rock Island and Scott County (Iowa) County Medical Societies and the Woman's Auxiliary.

Following a fine dinner, three speakers were heard. As representatives of the medical societies, Drs. Percy E. Hopkins and Harold M. Camp told of the work along the line of medical public relations, and of the state medical society in bringing to the public information concerning proposed legislation in Washington. It was shown that the primary interests of the medical profession today are those as citizens of the United States, and efforts were made to show that we in this country are following closely the pattern of Britain where the first steps toward a social state began some forty years ago.

The principal address of the evening was made by Joseph H. Hinshaw, a Chicago attorney who is an officer of the Illinois Bar Association, and chairman of their committee on public relations. The subject, "The Doctor, the Lawyer and Socialized Medicine" was presented in a most interesting way by the speaker who emphasized in no uncertain terms the development of socialistic and ultimately communistic trends in this country which if not checked, would remove another from the present small list of major countries having a system of free enterprise and a true democracy.

Following these presentations, a question and answer period was scheduled, with Dr. David B. Freeman as moderator. Quite a number of interesting questions had been handed in to the moderator, and the speaker to whom the questions were referred gave the answers. Dr. P. P. Youngberg, as chairman of the Educational Committee of the Rock Island County Medical Society was chairman for the meeting, and de-

serves much credit for arranging this interesting affair.

It was the opinion of many who attended the meeting that similar meetings should be held in all parts of the state, and in other states as well. Mr. James C. Leary, Director of the Illinois State Medical Society Bureau of Public Relations, was present, and he aided materially in

the selection of the speakers and subjects as presented.

Other county medical societies desiring to conduct a meeting of this type should get in touch with Mr. Leary who will render all possible assistance in making suitable arrangements. The address for Mr. Leary is 185 North Wabash Avenue, Chicago 1, Illinois.

ANTICOAGULANT THERAPY

This long term (anticoagulant) therapy has posed many problems. First of all the patient usually is standardized in the hospital with daily prothrombin tests for several weeks. During that time their idiosyncracies to dicumarol are studied. They then are placed on daily maintenance doses and report to the office weekly for a blood prothrombin time estimation. At that time their daily dose is prescribed for the following week. In this manner, patients, who would otherwise be invalids, have been able to carry on their occupation and their social activities.

Excerpt, The Use of Anticoagulants in the Treatment of Diseases of the Heart and Blood Vessels with Special Reference to Long Term Anticoagulant Therapy, William T. Foley, M.D., New York, The Journal of the Missouri State Medical Association, September, 1949.

CARCINOMA OF THE VULVA

Carcinoma of the vulva is one condition which will become of greater significance as the life expectancy increases inasmuch as it occurs most frequently in the sixth or seventh decade. Histologically it is, of course, a skin cancer but its malignant potentiality is great because of the rich lymphatic drainage in this area. The lesion is usually found on one or another of the labia or close to the clitoris. This form of cancer ranks fourth in frequency of malignant conditions of the female genital tract, cervical, fundal and ovarian carcinoma being more frequent.

Excerpt, Carcinoma of the Vulva, Committee on Control of Cancer, Kansas Medical Society, The Journal of the Kansas Medical Society, September, 1949.

MEDICAL ECONOMICS

The Medical Economics Committee. Chauncey C. Maher, Chmn., Hubert L. Allen, Emmet B. Bay, Edwin F. Baker, Carroll Birch, Thomas C. Browning, Roland R. Cross, James Graham, George Halperin, Edwin S. Hamilton, Ford K. Hick, Edwin F. Hirsch, May McDonald Milligan, Marie Wessels, Walter M. Whitaker, Holland Williamson.



Consultations in Obstetrics

Maternal deaths have reached an all time low in the state of Illinois. In the past ten years the mortality rate has dropped from 5.0 to 0.8 per 1,000 live births. This remarkable improvement in the clinical management of childbearing women has been attributed to many factors. Patients report to their physicians at an early stage of the pregnancy, pre natal care is more thorough, and the physician is better educated in the care of obstetrical problems. Over ninety per cent of the deliveries now take place in hospitals. Blood is usually available in adequate amounts. Antibiotics are used in a wise and judicious manner. However most observers agree that the greatest factor in this improvement has been the availability and prompt use of consultation with an experienced obstetrician as soon as the patient's condition is recognized as an abnormal one.

Yet the stillbirth and neonatal death rate has not been greatly lowered during the past ten years. This fact is important and suggests that proper consultation is still not used often enough or soon enough.

If the answer to maintaining this improvement in maternal welfare and the lowering of

our stillbirth rate is better obstetrics then we must study the causes of delay in consultation and seek or eradicate them.

One may argue that frequent consultation is not the answer to better obstetrics, but that each physician must improve his obstetric art. Yet there is no question that one already skilled in this art can give the better service to the patient. His skill must be available at all times. With modern communication and transportation no community today need be without the services of an experienced accoucher.

Some believe that all obstetrical cases should be handled only by those who are specially trained in obstetrics. This is an impractical idealism. General physicians not only continue to care for the great majority of patients but should do so. Obstetrics has always been the foundation of a family practice. Pre-natal care offers the opportunity to the physician to learn all about the physical, mental, socio-economic, and philosophical qualities of this family unit, to institute preventive medical care, and encourage proper living.

If proper consultation is the key to better obstetrics then we must inquire as to methods of

improving this relationship between physician and obstetrician. Certainly economics, personal idiosyncrasies and egocentricities, and a lack of understanding as to personal motives are the basic causes of these conflicts that should be eliminated. The failure of physicians, obstetricians, and hospital authorities to aid in this problem has led to unfortunate circumstances in which it was necessary to ask for the power of the local Board of Health to force consultation and obstetrical aid upon the practitioner. The necessity of this was at first deplored by many, and regretted by all who love freedom of thought and action. Yet in the city where this program was instituted, the results speak for themselves. Many lives have been saved because of these established rules, and all doctors now commend this vigilant attitude of the health authorities. But force should not be needed among intelligent men in progressive communities. We should be willing and able to solve our own problems. Those of obstetrical consultation merely demand an objective study by those concerned.

The obstetrical specialist must be willing to offer his services at all times with or without financial compensation. He must enter into this consultation in a spirit of humility, realizing that he is not in any sense a greater human than the man calling for help, but that he is needed only because of his knowledge and skill in this particular field. His first principle then is to further increase the confidence of the patient and the patient's family in their physician. This must be done at all times by both word and action. Errors of diagnosis, judgment, and management that may have been made before the specialist appears on the scene should never be discussed at this time. The present state of affairs alone is to be considered and the prognosis and management carried on from that point.

Too often precious time, effort, and energy are spent in talking about what should have been done, rather than what is to be done.

Once the specialist has been called in to see an obstetrical patient he must follow through in command of the case. In most instances this can and should be tactfully done from the sidelines, so that the relationship of the doctor to his patient is not disturbed. This demands not only tact and diplomacy on the part of the consultant, but his desire to help the patient and his colleague must overshadow any desire of im-

mediate fame or credit in handling a case. Thus examination during labor and help at delivery can be given to the practitioner in a calm friendly spirit. The specialist should always present his decision in management to the physician and then offer to perform any necessary operative steps. When objections are raised the consultant again must be diplomatically effective in persuading the doctor into wanting him to follow through.

Every physician in general practice realizes that operative obstetrics is a skilled art and that problems of abnormal obstetrics call for the judgment of tremendous experience. Thus he should have no fear of early consultation in all his troublesome cases providing that his consultant follows the wholesome ethical practices just mentioned. The only burden upon the physician is to recognize an abnormal obstetrical state and to call for proper help. The remainder of the problem falls on the specialist and it is undoubtedly ethical mistakes by the latter that have given the physician a bad taste; leading to delay in obtaining help in future cases often to the unfortunate detriment of the patient. Realizing one's limitations in surgical skill and judgment are certainly important.

It is up to the practitioner to see that his consultant is properly compensated for his work after free discussion with the patient's family. The consultant should be open minded and willing to serve without fee in all necessary instances, and his fee should always be dependent upon the character of the services rendered and the patient's ability to pay. No bills should be given to the patient until the amount has been discussed with the doctor.

Once the problem in management or the operative emergency is over, the specialist should retire to the sidelines and observe the future progress of the patient only by study of the record or by communicating with the doctor. All follow up visits are to be made only by the doctor in charge. The specialist should never emphasize his work in the case to the patient, but always that of the patient's doctor.

When the advice of the specialist as to judgment or operative procedure is not deemed correct by the physician calling for aid, then if agreement as to the better policy can not be made after a thorough friendly academic argument, a second consultant should be called. Should

his advice agree with that of the first specialist, the physician should accept the dictum and the first specialist then proceed. If the advice of the second consultant differs from that of the first, then the first should retire from the case and allow the second consultant to take charge.

It is a bad reflection on our character when outside authorities such as lay hospital superintendents, and board of health officials are forced to set the rules of obstetric conduct. We physicians must be the leaders in improving maternal and child welfare. This writer is only a neophyte in the consultation field, and these words of advice as to conduct are totally unnecessary for many individuals and institutions. But

to all interested in better obstetrics it is obvious that the obstetrician must realize that he has often made errors in procedure, and likewise the general physician must realize his need of the obstetrician.

Again there is no question but that the best way to solve existing difficulties over present local consultation practices is for both specialist and physician to get together on a friendly basis and discuss these difficulties openly and frankly. The best place to do so is always the meeting of your local medical society. The greatest benefit of the local medical society is the social gathering of physicians in all branches to solve their problems in a spirit of friendship, tolerance, and understanding.

J. R. W.

DOCTOR CITES LIMITATIONS OF TUBERCULOSIS VACCINE

BCG vaccination against tuberculosis as now advocated appears to be a rather puny weapon against the disease, says a Veterans Administration doctor.

Protection with the harmless, man-made BCG vaccine cannot be expected to succeed where natural vaccination with living, virulent human tuberculosis germs already has failed, Dr. E. M. Medlar of Sunmount, N. Y., points out in the Oct. 29 Journal of the American Medical Association.

BCG vaccine is a preparation for prophylactic inoculation against tuberculosis. It consists of living bovine tubercle bacilli that have been grown over a period of many years so that their virulence is greatly reduced.

Great numbers of people receive a "natural vaccination" by contracting a slight infection from other human beings, Dr. Medlar explains.

"In adults over 40 years of age, both minimal pulmo-

nary tuberculosis and deaths from tuberculosis are caused in large part by reinfection after a previous infection has healed.

"It is extremely doubtful that artificial vaccination can produce results superior to natural vaccination, and yet natural vaccination fails to control the disease.

"It is suggested that greater emphasis be given to the major problem in tuberculosis—unrecognized tuberculosis and that due to reinfection in adults over 40 years of age. An effective solution to this problem would make the use of prophylactic measures in youth unnecessary."

A social worker found four families living in one room. Chalk marks quartered the room for each family. "How have you been getting along?" she asked. "Purty good," was the reply, "until the old lady over there in the far corner got to takin' in roomers."

STATE DEPARTMENT OF PUBLIC HEALTH



Deep X-Ray Facilities in Downstate Illinois, 1948

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It is accepted that radiation therapy alone or in combination with surgery is one of the basic therapeutic measures employed in the treatment of cancer. In a cancer program, therefore, cognizance of the availability and degree of accessibility of such facilities assumes paramount importance. In our attempt to secure such information for Downstate Illinois we found that this data was not available in any printed or summarized form. Because we felt that there should be some tabulation of such facilities we set out to secure this information through the medium of a survey.

Questionnaires were sent to 133 hospitals registered by the American Medical Association and located outside Chicago. One hundred and thirty replies were received. In the tabulation of the findings the hospitals were divided as under 50 beds, 50 to 99 beds and 100 beds and over. For further comparison there was a breakdown

according to Northern, Central and Southern thirds of the State. Based on the 1948 estimates the population of the Northern third of the State outside of Chicago is 2,162,145, the Central third 1,647,162 and the Southern third 1,103,260.

Table I gives a breakdown of the hospitals surveyed by bed capacity. In regard to the institutions with a bed capacity under 50 there is fairly even distribution but when it comes to larger bed capacities the Southern part of the State is not on an equitable basis.

There are 44 certified radiologists in Illinois outside Chicago. Since most of these serve more than one area or institution we have attempted to bring this out in Table 2 in terms of units of service rather than merely the number of individuals performing the service. By radiologist units of service, we mean the number of different locations served by the 44 certified radiologists. The column *full-time hospital* indicates those

Table 1.
NUMBER OF HOSPITALS SURVEYED

District	Under 50 Beds	50-99 Beds	100 or More Beds	Total
Northern Third	15	13	32	60
Central Third	18	13	19	50
Southern Third	10	5	5	20
Downstate Total	43	31	56	130

Table 2.
RADIOLOGIST UNITS OF SERVICE

District	Full Time (Hospital)	Part Time (Hospital)	Radiological Private Practice	Total
Northern Third	13	34	11	58
Central Third	13	20	9	42
Southern Third	2	6	1	9
Downstate Total	28	60	21	109

who are the resident radiologists at the hospitals concerned. They may also be doing part-time work elsewhere. The column *part-time hospital* indicates the number of hospitals that have radiologists on a non-resident basis. The column *private radiological practice* indicates those who own and operate their equipment or who operate equipment as part of a clinic or group practice. Some of these serve part-time in neighboring hospitals.

Table 3 gives the number of hospitals with full-time radiologists according to bed capacity and district distribution. Table 4 gives the same information for hospitals with part-time radiologists. It is of course obvious that there is an overlapping of personnel in Tables 3 and 4. Chart I gives this same information by counties.

Table 5 shows the distribution of deep x-ray therapy equipment. Only those x-ray machines with a minimum of 200 kv are classed as satisfactory for deep therapy.

Although the prime purpose of our survey related to deep x-ray equipment, we coincidentally secured information in regard to available radium. Our interest centered in those hospitals owning radium since any hospital may of course rent radium as needed or may purchase radon. Table 6 gives this information.

Table 7 shows the availability of qualified radiologists and deep x-ray therapy equipment per thousands of population.

Table 3.
HOSPITALS WITH FULL TIME
RADIOLOGISTS

District	Under 50 Beds	50-99 Beds	100 or More Beds	Total
Northern Third	0	0	13	13
Central Third	0	1	12	13
Southern Third	0	1	1	2
Downstate Total	0	2	26	28

Table 4.
HOSPITALS WITH PART TIME
RADIOLOGISTS

District	Under 50 Beds	50-99 Beds	100 or More Beds	Total
Northern Third	6	10	18	34
Central Third	5	8	7	20
Southern Third	0	2	4	6
Downstate Total	11	20	29	60

Table 5.
DISTRIBUTION OF DEEP X-RAY THERAPY
EQUIPMENT

District	No. of Counties Having Equipment	No. of Machines Owned by Hospitals	No. of Machines in Doctors' Offices	Total No. of Machines
Northern Third	12	34	11	45
Central Third	12	20	9	29
Southern Third	4	4	1	5
Downstate Total	28	58	21	79

Table 6.
DISTRIBUTION OF RADIUM

District	Private Clinic	Hospitals Having Radium on Hand	Average mgms. per Institution	Total Milligrams
Northern Third	0	7	72.5	507.5
Central Third	1	8	103.3	930.0
Southern Third	0	2	159.5	319.0
Downstate Total	1	17	97.6	1756.5

Table 7.
RADIOLOGICAL FACILITIES IN PROPOR-
TION TO POPULATION

District	Radiologists	Deep X-Ray Therapy Equipment
Northern Third	1 per 108,107	1 per 48,047
Central Third	1 per 82,358	1 per 42,234
Southern Third	1 per 275,815	1 per 220,652
Ave. — Downstate	1 per 111,649	1 per 62,184

CHART I

DISTRIBUTION OF RADIOLOGIST UNITS OF SERVICE
BY COUNTY, DOWNSTATE ILLINOIS, 1948

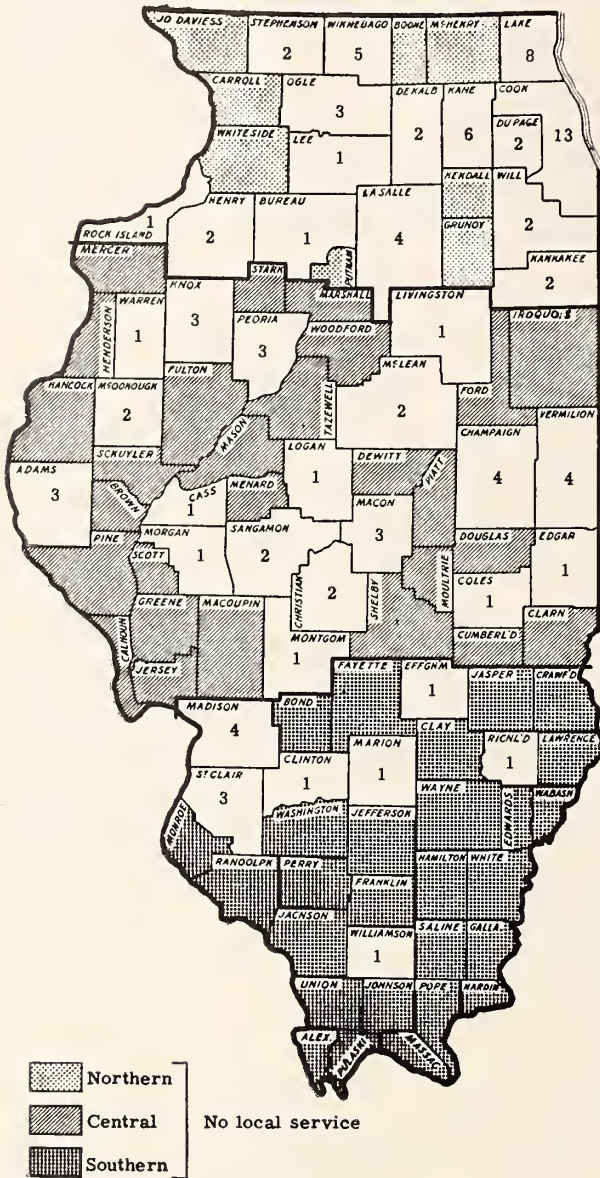


CHART II

DISTRIBUTION OF DEEP X-RAY EQUIPMENT AND
RADIUM BY COUNTIES, DOWNSTATE ILLINOIS, 1948

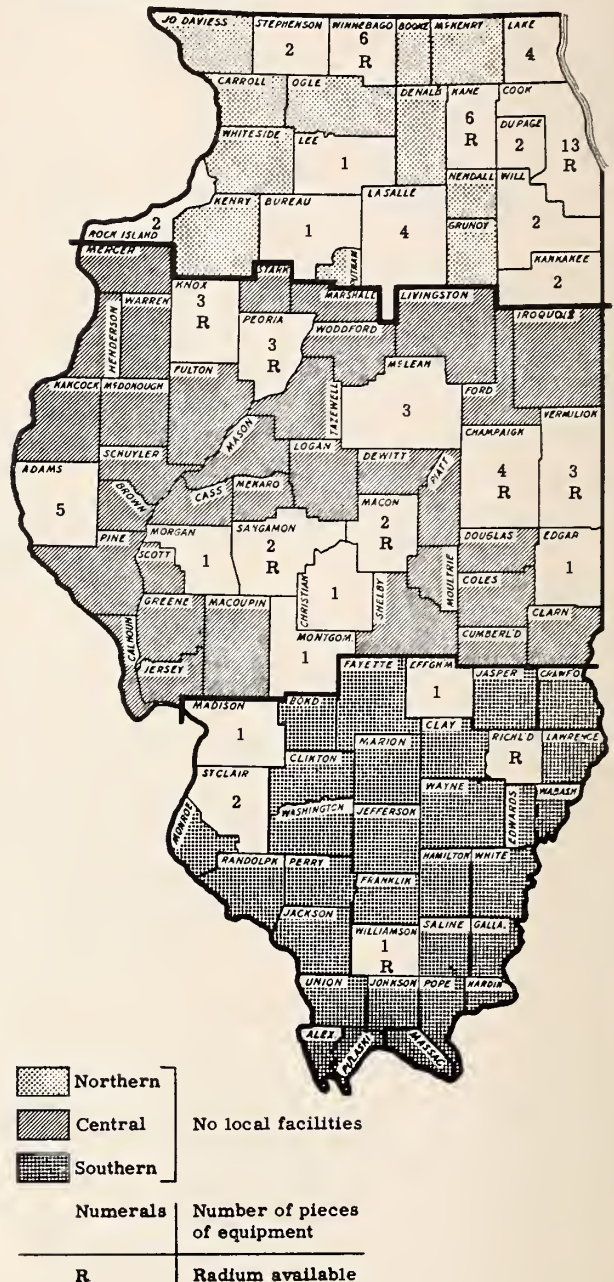


Chart II shows the distribution of deep x-ray equipment and radium by counties.

Discussion.

In analyzing the various assembled data one thing is glaringly apparent. Radiological facilities and service in the Southern third of Illinois are not comparable with those in the middle and upper thirds. The population of the Southern third of the State is of about half that of the Northern third, yet the ratio of registered hospi-

tals is only 1 to 3, the ratio of radiologist units of service 1 to 6, and the ratio of deep x-ray equipment is 1 to 9. Just as obvious a deficit exists when one compares the same items between Southern third and middle third; namely 1 to 2.5, 1 to 5 and 1 to 6.

As might be expected full-time radiological service is usually associated with the larger hospitals of 100 beds or over. This is equally true insofar as owning radium is concerned.

If radium is to be kept on hand, the American College of Surgeons recommends that there be a minimum of 150 milligrams in suitable applicators. Five hospitals maintain 150 milligrams or more and meet these recommendations. One hospital has 120 milligrams and five others have 100 milligrams each. The others have varying amounts less than 100 milligrams.

For Downstate Illinois the cancer death rate for 1948 based on estimated population was 153.28. Using the calculation that there are approximately four cases of cancer for every death the case rate would be somewhere in the region of 600 per 100,000 population. Using the same estimated population for 1948, there would be a radiologist rate of about 4 per 100,000. This would mean there would be one radiologist for approximately each 150 cases of cancer including cancer of the skin which requires less time for therapy. Between 40 and 50 per cent of the cases of cancer need some form of radiological treatment. Therefore, there would be one radiologist for about every 75 cases of cancer needing radiation. In most instances a radiologist does not confine his efforts to radiation therapy alone but also does diagnostic roentgenology. His day is arranged so that about half of it is devoted to radiation therapy. Allowing approximately one-half hour per patient, this would permit the treatment of about 8 patients per day. Taking an average of about 3 weeks per patient a radiologist should be able to handle about 130 cases of cancer per year. It would appear that the overall radiologist service potential is well in excess of the present demand. In some parts of Downstate it would seem to be rather a question of accessibility than availability.

The joint Federal, State and Local hospital construction program will do much to correct the deficiencies in the areas concerned. In Southern Illinois as part of this program there are three new potential centers for deep x-ray therapy. One hospital is under construction and the other two are in the final planning stages. The actual presence of the equipment of course is not the final answer. There must be qualified radiologists to operate the equipment. With the improvement of hospital facilities, however, there should be more incentive for such individuals to locate in these areas.

Chicago and St. Louis being medical centers there has been and still is a flow of patients in

those directions. Some of this flow has been voluntary and some has been due to referral of local physicians. The ability of these areas to care for patients, particularly those who cannot afford medical care, has reached the saturation point. The only Illinois hospital providing free care for Downstate patients without funds is the Research and Educational Hospital of the University of Illinois in Chicago. The number of beds available for cancer patients is quite limited. This hospital draws patients from the upper two-thirds of Illinois and an area along the Southeastern border of Illinois. St. Louis draws patients from the central and western part of Southern Illinois as might be expected since it is closer to this area. Most of these patients apparently go to the Barnard Free Skin and Cancer Hospital and to the Barnes Hospital. Both of these hospitals have out-patient departments.

It has been our feeling for some time that patients are being sent to these institutions who could have been treated satisfactorily locally. There have probably been two reasons to account for this: (1) lack of knowledge of local facilities and (2) it is easier to refer a patient to such an institution than to attempt to secure medical care funds locally. In any event the result has been the overloading of these institutions, the development of long waiting lists and a resultant delay in making treatment available. We do not know the details of the type of case referred to St. Louis but we do have the information as far as the Research and Educational Hospital is concerned. In all probability the findings would be similar. From January 1, 1948 to December 31, 1948 there were 88 cases of cancer outside Cook County that were referred to the Tumor Clinic, Research and Educational Hospital. In analyzing these cases it would appear that about one-fourth of the cases could have been treated locally with radiation. If special surgical technique is required it is understandable why a patient would be referred to the Research and Educational Hospital. When it is a question of radiation, however, in general there is no reason why the patient could not be treated at the nearest point where the service is available. This would be more satisfactory for all concerned. If the patient is without financial means there are three agencies where aid may be secured — Township

Supervisor, Old Age Assistance and Division of Vocational Rehabilitation. These agencies can pay for the patient's treatment at the selected hospital.

It is hoped that through this survey we can create greater familiarity on the part of the physician with what local facilities actually exist for the radiation treatment of cancer and that it will cut down the number of times patients are sent unnecessarily long distances for this form of therapy. Also it is hoped that this will aid to cut down the burden now being borne by those institutions to which these patients are now being sent.

SUMMARY

- 1. The findings resulting from a survey of radiological facilities in downstate Illinois have been presented.
- 2. Apparently the overall potential is greater than the demand.
- 3. In some areas, notably the Southern third, these facilities are not easily accessible.
- 4. The joint Federal, State and Local hospital construction program should help those areas in which deficiencies are present.

USE THE AMMUNITION FURNISHED YOU

If the medical profession of America values its personal freedom, each doctor must fight against passive acceptance of the "status quo." It is our duty to the American people, and to ourselves, to protect our system of free enterprise.

To do this, we must get the truth before the people.

The National Education Campaign of the American Medical Association has provided material which can be of tremendous value to us in our struggle to reject Compulsory Health Insurance.

Don't delay any longer. Fill out the coupon below and put this excellent material to work for our cause.

Please check items and note quantity desired.

Then mail to:

Dr. Harold M. Camp, Secretary
Illinois State Medical Society
Monmouth, Illinois

Quantity

- ☐ Question and Answer pamphlet
"The Voluntary Way is the American Way"
- ☐ Illustrated Folder, "Your Medical Program — Compulsory or Voluntary?"
Reception room and mail enclosure piece
- ☐ "Compulsory Health Insurance — A Threat to Health — A Threat to Freedom!"
Basic speech in pamphlet form
- ☐ "The Doctor," 19" x 20" color reproduction of Fildes painting, for office display
- ☐ "The Doctor," 35" x 35" blowup of Fildes painting, for large public display

NAME: _____

STREET ADDRESS: _____

TOWN: _____

CORRESPONDENCE



COST OF CARE FOR POLIO PATIENTS

To the Editor:

There have been many inquiries recently regarding the arrangements for covering the cost of care for poliomyelitis patients. There are a number of factors which will be of interest to your readers.

During 1949 a poliomyelitis incidence of unprecedented size (more than 37,000 stricken since January 1) has put serious financial strain upon the National Foundation for Infantile Paralysis. For the first time in its eleven year history it was necessary to conduct a Polio Epidemic Emergency Drive which although very helpful did not entirely meet current needs.

In its avowed purpose to lead, direct and unify the national fight against infantile paralysis the National Foundation undertook support of research and education, for in these areas lie the ultimate hope for eradication of poliomyelitis. These programs are not to be compromised in any way.

The greatest cost to the National Foundation, however, is payment for medical care to patients. It is urgent for all physicians to assist in the institution of measures which will reduce costs without prejudice to patients. The chief costs are for hospitalization. Many poliomyelitis patients are hospitalized when they can be cared for at home at a reduced cost.

Our experience in this year's epidemic which has spared virtually no part of the country suggests the following:

1. Abortive, nonparalytic and mildly paralytic poliomyelitis patients are being hospitalized in the mistaken idea that the stated period of isolation must be spent in the hospital.

2. Overly prolonged hospitalization is frequent. This is particularly true of the paralytic patient who has achieved maximum improvement from daily physical therapy. Home care with periodic office or clinic visits is then in order.

3. There still exists in some places a general attitude that poliomyelitis is a bizarre disease which only a few physicians can manage. This is not so. It is disturbing, for example, to find physicians leaning so heavily upon the guidance of physical therapists and nurses. The physician's assessment of the total patient is the best index in determining when a patient shall leave hospital to receive home, office or clinic care.

4. Patients hospitalized on general ward services are not charged medical fees ordinarily. When patients are hospitalized in isolation wards for poliomyelitis, however, bills for medical fees are at times submitted. Payment is frequently made by the local chapters of the National Foundation whose treasuries are now generally depleted.

It is hoped that your readers will understand clearly how urgent is our need for cooperation from all practicing physicians in the matters mentioned above.

Sincerely yours,
Hart E. Van Riper, M. D.
Medical Director

"YOUR MENTAL HOSPITALS" NEW LAW FOR MENTALLY DEFICIENT

Numerous changes have been made in the laws for the mentally deficient in order to modernize the procedures and the terminology in keeping with the progress in this field. After considerable study by a Committee composed of interested groups in the medical and legal profession, and lay organizations, a bill was drafted following rather closely the Illinois Revised Mental Health Act. This was passed by the legislature and became effective on October 1, 1949. The old "feeble-minded" law of 1915 was repealed and in keeping with current professional thought, it eliminated from the law the term "feeble-minded" replacing it with the words "mentally deficient".

In addition to the court commitment, the new law authorizes voluntary admissions. The steps or procedure for admissions are briefly described below:

I. VOLUNTARY ADMISSION

Any person who is mentally deficient may apply directly to the Superintendent of a hospital for the mentally deficient¹ for admission upon presentation of a notarized petition (these petitions are available from the County Clerk).

The petition may be signed by:

- a. The person seeking admission, if of lawful age.
- b. By the parent or guardian, if the person is a minor.
- c. By any relative or attorney with the consent of the patient.

A voluntary patient may leave the institution fifteen days after the submission of a written request to the Superintendent.

II: COMMITMENT

Any citizen residing within the same county in which a mentally deficient person resides,

may file a notarized petition with the County Clerk, stating that the individual is in need of care, detention and training in an institution for the mentally deficient. The person should be examined by a physician or a qualified psychologist prior to the filing of the petition. If he has not been examined, the court shall appoint a physician or a qualified psychologist to examine the individual.

The County Judge will set a date for the hearing. If a jury trial is demanded, the jury will consist of six persons — one, at least will be a physician or a qualified psychologist. If a jury trial is not demanded the Court will appoint a Commission composed of two physicians, or one physician and one qualified psychologist to examine the person to determine if he or she is mentally deficient. The Commission will render a verdict. The Court may accept or reject the verdict. The Court may dismiss the person or commit the individual to the care and custody of relatives, to a private licensed institution, or to the Department of Public Welfare for institutional care.

Due to the overcrowding in the Illinois State Institution for the Mentally Deficient, it is necessary to place the voluntary and committed cases on a waiting list.

Under the old law all discharges from these institutions were by Court Order. Now the patients may be released directly by the hospital staff as soon as they deem advisable. The patient may be given a Conditional Discharge (a temporary supervised trial period) or an Absolute Discharge (complete discharge). Thus it will be possible for an institutional staff to release those patients who have borderline intelligence and social adjustability. If after supervised release it appears that the patient is able to make a satisfactory adjustment, the Department of Public Welfare is authorized to discharge the patient.

These are some of the most important changes in the new "Act for the Mentally Deficient".

G. A. Wiltrakis, M. D.
Deputy Director
Medical & Surgical Service

¹ Private institutions, Dixon State Hospital or Lincoln State School & Colony.

NEW FELLOWS, AMERICAN COLLEGE OF SURGEONS

The following Illinois physicians were initiated as Fellows of the American College of Surgeons at the convocation in Chicago, October 21, 1949.

Joseph S. Angell	Oak Park
Willard J. Berwanger	Glen Ellyn
Harnus W. Bloemers	Chicago
Robert E. Bowen	Springfield
Nicholas J. Capos	Chicago
Paul V. Carelli	Chicago
Clifford L. Carter	Ottawa
Harold Cohen	Chicago
Joseph T. Coyle	Chicago
James H. Cross	Hines
Roland R. Cross, Jr.	Hines
William W. Curtis	Springfield
Walter F. Dillon	Chicago
Egbert H. Fell	Chicago
Charles E. Fildes	Hines
Harry A. Fitzmaurice	Chicago
Edson F. Fowler	Evanston
Theodore A. Fox	Chicago
Edwin C. Graf	Chicago
Walter S. Grant	Chicago
Eugene A. Hamilton	Chicago
Harry T. Haver	Chicago
James A. Henderson	Quincy
Ernest Hessl	Brookfield
W. Francis Jacobs	Chicago
Elwood F. Kortemeier	Freeport
Paul T. Lambertus	Quincy
William A. Larmon	Chicago
William M. Lees	Chicago
Rocco Vincent Lobraico, Jr.	Chicago
Saul Allen Mackler	Chicago
David B. Maher	Chicago
W. Robert Malony	Pittsfield
Douglas W. Mazique	Chicago
Martin J. McCarthy	Chicago
Frank A. Morrison	Alton
Richard F. Murphy	River Forest
Everett E. Nicholas	River Forest
Guy O. Pfeiffer	Belleville
Taft Claude Raines	Chicago
Frank J. Saletta	Chicago
Louis Scheman	Chicago
Robert L. Schmitz	Chicago
Edward L. Schrey	Chicago
Mary S. Sherman	Chicago
Joseph Silverstein	Chicago
Howard P. Sloan	Bloomington
John T. Small	Rockford
Lyman Smith	Elgin
Simmons S. Smith	Rockford
William P. Standard	Macomb
Philip J. Stein	Chicago
Orion H. Stuteville	Evanston
Hans Victor Von Leden	Evanston
George H. Waller	Decatur
Alfred C. Wendt	Chicago
George Z. Wickster	Oak Park
Kane Zelle	Springfield
Edward N. Zinschlag	Mattoon

HEMATOLOGISTS WILL MEET IN ENGLAND

The International Society of Hematology will hold its Biennial Congress at the University of Cambridge, Cambridge, England from August 21 through 26, 1950.

The Program committee is in the process of receiving titles for papers and scientific exhibits to be presented at the Congress. Material to be submitted for consideration for the program may be sent to Dr. I. Davidsohn, Mt. Sinai Hospital, Chicago, Illinois, or Dr. S. Mettier, University of California, San Francisco, California. Those desiring to present scientific exhibits should make application as soon as possible.

TWENTY-THREE CLINICS FOR CRIPPLED CHILDREN LISTED FOR JANUARY

Doctor Herbert R. Kobes, director of the University of Illinois Division of Services for Crippled Children, has released the January schedule of clinics for physically handicapped children. The Division will conduct 18 general clinics providing diagnostic orthopedic, pediatric, speech and hearing examinations along with medical social and nursing services. There will be 4 special clinics for children with rheumatic fever and 1 for cerebral palsied children.

Local medical and health organizations, both public and private, cooperate with the Division in providing this clinic service to Illinois' thousands of physically handicapped children. The examining clinicians are selected from private physicians who are certified Board members. Any private physician may prefer to bring to a convenient clinic those children for whom he may want examinations or may want to receive consultative services.

- The January clinics are:
- January 4 — Joliet, Will Co. TB Sanitarium
 - January 4 — Alton, Alton Memorial Hospital
 - January 5 — Cairo, Public Health Building
 - January 10 — E. St. Louis, St. Mary's Hospital
 - January 10 — Quincy, St. Mary's Hospital
 - January 10 — Peoria, St. Francis Hospital
 - January 11 — Hinsdale, Hinsdale Sanitarium
 - January 12 — Springfield, St. John's Hospital
 - January 12 — Elmhurst (Rheumatic Fever) — Memorial Hospital of DuPage County
 - January 13 — Chicago Heights (Rheumatic Fever), St. James Hospital
 - January 13 — Clinton,
 - January 17 — Danville Lake View Hospital
 - January 18 — Sterling, Sterling Public Hospital

January 18 — Elgin, Sherman Hospital
 January 19 — Rockford, St. Anthony's Hospital
 January 19 — Mt. Vernon, Masonic Temple
 January 24 — Salem, American Legion Hall
 January 24 — Peoria, St. Francis Hospital
 January 25 — Springfield (Cerebral Palsy),
 Memorial Hospital
 January 25 — Evergreen Park, Little Company
 of Mary
 January 26 — Bloomington, St. Joseph's Hos-
 pital
 January 27 — Chicago Heights (Rheumatic
 Fever), St. James Hospital
 January 31 — Effingham (Rheumatic Fever),
 Douglas Township Building
 Children accepted for Division care are those
 with:

1. Orthopedic conditions including acute polio-
 myelitis
2. Rheumatic fever and heart disease
3. Conditions of the nervous system
4. Cerebral palsy
5. Congenital and acquired defects which re-
 spond to plastic surgery
6. Speech defects associated with organic con-
 ditions
7. Hearing loss and deafness
8. Epilepsy

DOCTOR IS YOUR NAME LISTED?

The Scientific Service Committee of the Illi-
 nois State Medical Society is preparing an
 addenda or supplementary list of speakers and
 subjects for use by county medical societies in
 arranging their regular programs. The new com-
 pilation will be a supplement to the present List
 of Speakers which was revised three years ago,
 including the names of some 500 physicians who
 are willing to cooperate in the activities of the
 Scientific Service Committee by lecturing to the
 county medical societies in the state.

Physicians who wish to be included in the
 new List should send their names and subjects
 to Miss Ann Fox, 30 North Michigan Avenue,
 Chicago 10, Suite 1416.

It is hoped that every County Medical Society
 in Illinois will be represented in the forthcom-
 ing supplement.—Robert S. Berghoff, Chairman.

THE C.M.S. ANNUAL CLINICAL CONFERENCE

Attendance at the 1950 Clinical Conference
 of the Chicago Medical Society should be a must
 on your schedule. Set aside four days — Febru-
 ary 28, March 1, 2, and 3, 1950 for valuable
 postgraduate observations.

There will be Clinical Sessions and Scientific
 Lectures by the nation's foremost medical au-
 thorities and educators. There will be selected
 Scientific and Technical Exhibits, displayed that
 will dramatize medical developments "up-to-
 date."

A feature of the Conference will be color tele-
 vision of actual surgical procedures, and also
 black and white telecasts. Observers will see
 close-up surgical techniques and medical pro-
 cedures in full color detail.

Mark your calendar now for February 28,
 March 1, 2, and 3, and make your reservation
 direct to the Palmer House which will be the
 headquarters for this great 1950 meeting.

TRAINING PROGRAM IS APPROVED

To the Editor:—

Would you be so kind as to insert in your jour-
 nal the notice that the three year training pro-
 gram in Gynecology and Obstetrics at the Cook
 County Hospital has been approved by the Coun-
 cil of Medical Education and Hospitals of the
 American Medical Association.

John B. O'Donoghue, M.D.
 Secretary, General Staff
 Cook County Hospital

ORIGINAL ARTICLES



The Menace of the Coming Months

The Hon. L. C. Arends

**Member of the House of Representatives,
17th District, Illinois
Melvin**

Right at the outset it might be well to explain the possible reasons for my being one of the speakers of the day. As a member of the House of Representatives for 15 years, I have been extremely interested in problems of government as they affect *all* our citizens. There seems to be no end to the troublesome problems that confront the Congress, and, at this particular time, we are bogged down under a terrific load of responsibilities.

Ours is a hard job and all too often a completely thankless one. On occasion, one thinks, "Well, why not throw in the sponge and let someone else do the worrying." However, a good citizen doesn't do such things and we continue to fight to keep alive the best form of government ever devised by man, a republican representative form of government handed down to us under the Constitution.

Among the many proposals facing Congress at this time is the one of compulsory health insurance. I have had many, many letters regarding this legislative proposal and, accordingly, began to write replies to the many doctors in my district, stating my views on what is commonly known as socialized medicine. I decided to send a letter to each doctor in my district setting forth in clear pattern my views and convictions on this all-important proposal. As a result of this letter to the doctors in the 17th Congressional district of Illinois, I have had very many favorable responses. Evidently such letters received wider distribution than I had anticipated and the letter evidently paved the way to my being invited here today as one of your speakers. Needless to say, I rejoice in the opportunity, for it affords me these few moments to tell you exactly what the thinking of an elected official is and how he views the problems that face you, as individuals, and your organization and, far and above all else, the welfare and health of all our citizens.

Presented at Second Speaker's Conference, LaSalle Hotel, Chicago, September 11, 1949.

As one member of Congress, I am opposed to socialized medicine, first because the whole concept of state regimentation springs from the basic doctrines of Communism and Marxism; and second, because the United States today enjoys the highest standards of medical care and the highest standards of public health and general well-being of any land on the face of God's great globe — and I do not intend to stand idly by and see these fine standards sacrificed to the experimental socialism of our national planners and bureaucratic collectivists.

Wherever we encounter socialism, we note four unfailing characteristics of its operations, in whatever field.

First: *It promises more than it can deliver.* If you question that, a half-hour with the British national budget tonight will give you the answer.

Second: *Socialistic programs always cost much more than the original estimates* — as we shall see when we examine in some detail the unhappy experience of Britain under socialized medicine during the last fifteen months.

Third: *Every program of state socialism entails an ever-expanding burden of administrative bureaucracy, red-tape, forms, compliance checkers, and official snoopers delving into the intimate daily concerns of the people.*

And fourth: *Every program of state socialism tends to grow and expand from year to year, gradually taking in more and more territory, until the people are literally smothered and hog-tied by governmental restrictions and regulations.*

In all human history, there is not a single exception to this rule of bureaucratic growth. The blight of bureaucracy is all-pervading. It corrupts and demoralizes everything it touches.

And let me assure you that there is nothing in the recent history of the Social Security Board or the Federal Security Administration to suggest that the proposed new program of socialized medicine would be administered in a manner different in any way from the standard pattern of bureaucratic operations—forms, paper work, regimentation, shocking inefficiency, and scandalous waste.

Let me read to you what one qualified expert in Washington had to say about today's runaway bureaucracy in America. This quotation is

from no less an authority than Mr. Lindsay Warren, the Comptroller General of the United States. His Agency, the General Accounting Office, has the final audit and approval of every voucher cleared for payment by any federal agency. He would eventually audit every doctor bill for payment — if socialized medicine should become the law of the land. He is the one man in the United States who knows intimately and precisely the structure and functions of every segment of our sprawling federal bureaucracy. Here is his description of Washington today — an interesting description from a man who formerly served as a Democratic member of the House of Representatives. He says: "The government is too big. It's a hodge-podge and a crazy quilt of duplication, over-lap, inefficiencies and inconsistencies. It is probably the ideal system for to pay the bill."

That, ladies and gentlemen, is the testimony of the Comptroller General of the United States before a Committee of the Senate on January 25, 1949. I submit that to turn American medicine over to such a clumsy, headless monster as Lindsay Warren describes, would be to turn back the clock of progress by fifty years overnight!

I submit that when an American citizen is sick or infirm, he wants to consult a doctor of medicine, not a doctor of philosophy in the Social Security Board, nor a doctor of law in the Federal Security Administration, nor yet a doctor of political science, nor a doctor of civil administration.

The proposals for socialized medicine now before Congress seek the nationalization of American medicine down to the last bottle of aspirin, with Washington in complete direction and control of every hospital, every medical school, every research laboratory, every physician, every dentist, every nurse, and every hospital technician in the land.

To my mind, this issue reaches to the very roots of American constitutional government. For I believe firmly that if this plague of socialized medicine can be fastened upon the people of the United States by adroit government propaganda, then it will not be long before the last vestige of freedom under law will disappear in every other relationship of life.

For if American medicine can be taken over by the Washington bureaucracy, then it will be only a matter of time until education will be taken over and then insurance, then publications and public intelligence finally all entertainment and cultural expression. The hand writing is on the wall.

That, at least, is the history of national socialism in modern times. It must be complete and total.

For so long as men and women are free in one sphere of life, they will push and struggle for freedom in wider spheres. At length, only the proven measures of the Police State can repress the human instinct for freedom.

Let us keep in mind the classic admonition of Winston Churchill, who declared from the mountain tops of prostrate Britain in the grim and bitter days of 1943:

“We must beware of trying to build a society in which nobody counts for anything except the politician or an official — a society where enterprise gains no rewards and thrift no privileges.” Socialized Medicine In Soviet Russia Today — Communist Russia has moved farther along the path of complete and absolute state medicine than any other country. You will be interested in a current description of medical administration in Soviet Russia. Let me say that this is a wholly sympathetic description, for it was written by an American Communist, who admits that he got much of his basic material from Amtorg, the Soviet trading office in New York. Here is his description of Russian medicine today:

“In 1918 medical institutions and the treatment of disease were nationalized and made a function of the State. Hospitals, sanatoria and pharmacies became state institutions, and doctors, internes, nurses, druggists, clinical workers, laundresses and chauffeurs employed by hospitals and clinics, were organized in the Medical Workers Union.”

There’s an authoritative definition of state medicine today, wherever we find it around the world. And do not overlook the one big union of all medical personnel — from doctors and nurses down through laundresses and chauffeurs. That’s elemental Communist doctrine — one big union for every trade, craft or profession.

That’s the road we travel when we take up socialized medicine as a national policy.

Sad Results Of Socialized Medicine In England — The Government took over all medical administration in England as of July 1, 1948. In the fifteen months since that memorable date in medical history, there has been accumulated a considerable volume of testimony to suggest that the experiment is encountering serious difficulties — many of which were not even foreseen by the sponsors and advocates of the program.

First, the program is costing a great deal more than the original budget estimates. The budget, for example, carried \$28 millions for dental care for the first nine months of the national program. The British Dental Association now estimates that dental care alone for those first nine months actually cost \$160 millions!

That’s the kind of planning we get from State Socialism, in whatever sphere. The Socialists who are engineering the welfare state do not dare to tell the people in advance how much their dreams and visions really are going to cost.

Another striking fact from the recent English experience is this: When the program was launched the government estimated that the medical services would issue 3 million pairs of eye glasses the first year. But demand turned out to be at the rate of 25 million pairs a year during the first six months! In February, 1949, when the plan was only in its eighth month, Health Minister Bevan announced in great anguish: “The rush for spectacles is so great that it has overtaken production capacity.”

About the same time, one of the reputable British medical journals carried a note from an optician located in one of the rural southern areas: “I have discovered that in a certain Southwest town a considerable number of new spectacles have been located in the pawn shops.”

In other instances, in the London metropolitan area, it was discovered that women would save the tax eaters, but it is bad for those who have up their medical prescriptions for several weeks, until they made up sufficient purchasing power to buy a bottle of imported hair rinse, facial cream or nail polish. By these irregular devices, the British cosmetic bill is being transferred, in part at least, to the medical budget. It requires no stretch of the imagination to guess how vast and expensive an enforcement agency eventually would be required to circumvent such fraudulent operations in a population of 45 mil-

lions enjoying give-away medicine at the expense of the national Treasury.

Yet these cases of fraud and abuse are but fragmentary aspects of the larger picture — a picture which spells the gradual breakdown of all medical services in England.

This program was to cost \$1,500,000,000 a year — when it was being *sold* to Parliament by its sponsors. But the first year's cost was \$2,100,000,000 — or 40 percent more than the planners' original GUESSTIMATES. British budget estimates for the second year now are in the range of \$2,500,000,000 — \$55 per capita.

If we apply these figures to our American population, we arrive at \$8 $\frac{1}{4}$ *billions a year for Socialized Medicine in this country.*

The special medical taxes collected under the British health insurance scheme cover only about *one-sixth* of the actual cost of the services rendered. Yet the whole program was offered originally as one which would be *completely self-supporting.*

When the British plan became effective last year, the government took over ownership and management of 2,751 hospitals in England and Wales. Of this number 1,647 were owned by the cities and towns, what we call city or county hospitals, and 1,104 were voluntary hospitals. A few hospitals owned by labor unions and religious orders were exempted from confiscation, but these exceptions were negligible in the national picture.

Not only did the government take over the hospitals as units of real estate, but in each case the endowments of the voluntary hospitals also passed into a national pool. Under this arrangement, the private endowment of a hospital in Chicago would at once become available for the support of a hospital in Seattle or Tampa.

Advocates of socialized medicine in Britain insisted vigorously that physicians would be free to participate or not in the nationalization scheme, as they preferred. But with all hospitals under government control and direction, this freedom of choice was entirely fictional. For doctors who did not sign up with the government plan were forever excluded from practice in any government hospital. Here is direct personal testimony on this point from Dr. Donald B. Brazer of 73 Harley Street, London:

"The specialist has no alternative but to be in the plan, at least to some extent. If he does not come in, he is denied the use of the hospitals — and that is professional suicide."

When a student completes his medical training in England, he may not select his own area of practice. He is *assigned* to a given locality, just as an army doctor in this country might be assigned to Fort Bragg, or a navy doctor to Guam.

Again, if he elects *not* to accept the government's assignment, he is denied access to the government-controlled hospitals. Nor may he rent a government-owned house, or any house or apartment subsidized by government construction funds or government building loans; nor may he buy medicines, equipment and instruments from the government-monopoly which is the distributing agency for all such equipment and supplies.

Such is the new definition of freedom-of-choice under today's state socialism.

And this is precisely the road along which our own advocates of the Welfare State are attempting to lead the American people.

Note too, that the arguments at home today are exactly the arguments used in Britain — no doctor will be *compelled* to participate in the scheme! Technically that is true in England. The young doctor is under no *legal* compulsion to join up. But if he does *not* join up, he is destined to end up as a street car conductor or a truck driver — for the career of medicine is closed to him — closed by the iron hand of the government monopoly in medicine.

Government doctors in England are paid a flat fee of \$3.50 a year for every patient assigned to their panel. The government also pays for all medicines, artificial limbs, eye-glasses, toupees, braces and corsets, dentures and surgical appliances.

Many doctors in London today see as high as 250 to 300 patients every day! Patients queue up for 2 or 3 hours awaiting their turn. Most patients, on routine calls, get an average of less than 3 or 4 minutes of the physician's time. One London physician has reported that, after deducting office expenses and his nurse's pay, he gets an average of 35 *cents* for each office call!

There are so many forms and reports to be completed for the Health Office that most doctors are compelled to spend as much time on paper work as in seeing patients. One London physician has satirized his typical day in these bitter words:

"Spectacles? Ah, yes . . . a *green* form. Good day! Next? Milk, yes, of course a *buff* form. Next? a sickness benefit certificate to be sure, a choice of forms *pink, white* or *blue*, depending on the type of employment."

Lord Horder, physician to the royal family, offers this comment: "Medicine in Britain has become a branch of the civil service. We are no longer medical experts; we sit and sign forms. We have no time to diagnose our patients' diseases; but pass them on to other persons and institutions, knowing full well that they cannot dispense the health benefits which may or may NOT be needed."

This has been the general picture wherever socialized medicine has been attempted. The swivel-chair bureaucrats in Washington or London cannot provide any more medical service than the medical profession can handle.

Germany began this unhappy experiment more than 60 years ago. In less than fifteen years, Germany had one clerical assistant on the medical payrolls for every 100 patients registered under the plan.

Apply that figure to the United States and you have a new government payroll of 1,500,000 administrative helpers in the medical service — a new bureaucracy about four times the size of the present post office department — about as many men as we have today in the army, navy and air forces combined!

And that, mind you, is for *clerical* and *administrative* help alone — it does not include a single physician or surgeon, dentist, nurse, or laboratory assistant.

All in all, our new medical bureaucracy would number more than 2,000,000 payrollers — all directed from Washington. That's been the unbroken experience wherever this scheme has been shackled upon the people — in Austria, Germany, New Zealand, Russia, and now in Britain.

America must not be led down this tragic path!

Chicago Bar Association Opposes Socialized Medicine — As the medical capital of the United States, Chicago and the State of Illinois have been especially alert to the challenge of political medicine — the *big* step to the completely socialized welfare state.

The Chicago Bar Association, through its Committee on Federal Legislation, has soundly denounced all pending proposals for socialized medicine, as recently as July 14, 1949. This Committee's report was approved unanimously by the Board of Managers of the Chicago Bar Association. Let me read one or two significant passages from this report:

"It is our considered opinion that the invasion of government into the practice of medicine presages a *similar* intrusion into the practice of law. It has been said that the tide of governmental management is resistless, that one may as well become reconciled to the fact of ever-increasing authoritarian regulation. That there has been such a movement is *no reason* why it should *not now be stemmed*, and if possible reversed."

That sentiment, it seems to me, is the very beginning of the *winning fight* against socialized medicine. The American people must be alerted to the world tide of socialism and bureaucratic collectivism which flows out from Soviet Russia in ever-widening circles, through our own fellow-traveler organizations. We must take a stand, not against one item in the socialist program, nor yet against two items. We must take a stand on *principle against state socialism* — and be prepared to fight *any and every proposal* which heads in that direction!

And let me remind you that socialized medicine is *not* a program designed to care for the needy and the under-privileged. On this point the report of the Chicago Bar Association was clear and emphatic beyond misunderstanding.

That report said: "The principle of government aid to the needy or improvident is not the object of this bill. What it proposes to establish is Government control of the medical care of every man, woman and child in the United States, including all who are amply able to provide all necessary care for themselves and their dependents and are doing so at the present time."

So this is not a program for the needy. It is a greedy grasp for power by the Washington bureaucrats.

Nobody wants socialized medicine in the United States save the federal payrollers who plan to administer the program. It would make many lush jobs in Washington. In time, every city, town and village would have its official medical staff, appointed from Washington, just as every community formerly had its O.P.A. czar, its housing expeditor, or rent controller. Doctors would be appointed like postmasters. Hospital administration and medical care soon would degenerate to the efficiency level of the post office or the weather bureau.

Socialism is a contagious virus. There is only one effective antidote for it — patient, persistent, determined and effective educational work.

I do not intend to see socialism take over in America if I can avert it. But a member of Congress can prevail only to the extent that he is supported and sustained by a militant and determined constituency at home.

I have explained the path I have chosen, and I intend to stick to that line of Americanism as long as there is a square foot of ground on which to stand and fight.

One question remains to be answered. You know and understand fully my views and the line of action I, as a legislator and one who may vote on the question at a future date, will follow. Permit me, then to inquire, "What are you going to do about it?"

First, I assume you do not want compulsory health insurance, and second I feel you must know that to avoid its being thrust upon us, some one necessarily will have to do something about it. Now who is best fitted to meet this challenge? The doctors, of course.

In my letter to the doctors in my district, I stated: "Now, Doctor, I want to throw out a sort of challenge to you, as a member of the medical profession. The mere fact that a bill for compulsory health insurance has been introduced in the Congress and the possibility that such legislative proposal may be considered by Congress within a year or two, convinces me our government, by one step after another, is moving toward socialism. The decision as to our future form of government lies of course, with the 531 members of Congress. As long as a majority of such members oppose legislation like compulsory health insurance, everything will be fine but already, to my notice, there are too

many individuals here who apparently believe that the thing to do is to have Uncle Sam be "master of all" which, in the end, will create not only national socialism, but likewise, financially wreck this country.

"To my way of thinking, doctors are among the very most influential individuals in any community since they not only work with people to cure their ills, but likewise, in many cases, they are father advisers to patients, even to family troubles, etc. Therefore, my thought is that doctors must do something about politics, meaning that they are going to have to get into politics up to their necks whether they like it or not. Merely stating their opposition to compulsory health insurance to a few of their friends or sending the A.M.A. \$25 to fight such proposal, is not enough. In other words, doctors are going to have to go into action on the political front.

"During the past several months, I have made the following suggestion to various doctors who have written me — namely, that they make an agreement with all the doctors of their County Medical Associations to write personal letters to each and every one of their patients, setting forth reasons in clear, concise manner, why they are opposed to compulsory health insurance, and, in turn, asking these individuals to also oppose the program. In addition, I have suggested that in fairness to their Representative in Congress, regardless of his or her name, and regardless of party affiliation, the patient who receives the doctor's letter should be asked to support such Member of Congress who entertains the same fundamental beliefs in opposition to compulsory health insurance as does the doctor who writes the letter. My making such a suggestion is not wholly selfish, but is expressed with the belief that the more people we can get interested in contacting Members of Congress in opposition to compulsory health insurance, the quicker we can bury the whole idea.

"As mentioned above, this is somewhat of a challenge to each and every doctor. The time has come however when the doctor, *as well as every small businessman in the country*, is going to have to take off his gloves and get into the political arena, devoting some of his time, effort and money in support of individuals who hold the same belief in government principles that the doctor or small businessman does. In no other way are we going to be able to save our present

form of government. Such is my honest opinion.”

These quotes from my letter must clearly indicate to you exactly what I feel the responsibilities of the doctors are. I am not pleading that you do anything for an individual by the name of Les Arends, or Bill Jones, or Frank Smith who may be a member of Congress, but I am pleading that you doctors, as individuals, do your best in seeing to it that the right type thinking individual be elected to the Halls of Congress in order that we may successfully and overwhelmingly defeat the proposal of compulsory health insurance when it reaches the floor of the House for consideration. You dare not shirk that responsibility. It is your job just as much as it is mine, and no longer are you going to be able to sit by, tending to your own knitting without exercising some of your time, money and efforts toward the defeat of this all-out move toward socialism, which I am convinced is already beginning to engulf this nation of ours. Yes, the steps may be, to a degree, hidden, but the hand writing on the wall becomes plainer with each succeeding day.

I well recognize that doctors are busy and, in most instances, are serving their communities and their patients well. Yet I say to you in all frankness, gentlemen, that is not enough. In my 15 years in political life, I have run into but very few doctors who are interested at all in this business we call “politics”. Sure, some will say, “I’m a Republican” or “I’m a Democrat”, but I do not recall ever seeing more than one or two

at any political meeting which I have attended. In other words, if you are going to leave the matter of politics up to what is commonly known as “politicians”, then you are entitled to get just what politicians give you.

Ours is the greatest nation on the face of the globe and somehow we must keep it that way. We are liberty-loving individuals who operate under a free system of government that makes for happy living for the individual. No other nation of people have known the peace and contentment, nor have any people enjoyed the privileges and rights that our nation of citizens have enjoyed down through the years. Do we want to see that destroyed or are we willing to do something about it?

In closing, I repeat that doctors are amongst the most influential individuals in community life and you can contribute greatly toward changing present trends in government if you but will.

Do you have the courage to face this challenge? That is the question you must answer for yourselves. For my part, I am willing to do my best in opposition to all socialistic schemes which we now and in the future will encounter. These socialistic plans must be knocked off, one after another, if we are to remain a nation of free people.

Let’s get busy and do it. I ask, are you willing to accept your share of the responsibility in the fight that lies ahead to save the American Way of Life? I sincerely hope so!

SURGERY OF GALL BLADDER AND BILE DUCTS

My own experience in a large group of cholecystectomies with stones, without any other associated diseases, has been very gratifying. Every patient is entitled to palliative treatment during or following his first attack of colic. But if the attacks recur, and the symptoms become more persistent, operation is definitely indicated.

Prolonged suffering can be obviated, and occasional lives saved if the operation is performed after the diagnosis of a persistent and troublesome gall bladder disease has been reasonably well established.

Excerpt, Surgery of the Gall Bladder and Bile Ducts, A Report of 975 Cases, Max Danzis, M.D., Newark, N. J., The Journal of the Medical Society of New Jersey, September, 1949.

Neurosurgery and the Illinois State Hospital System

Eric Oldberg, M.D.

Chicago

On December 31, 1948, the inmate population of the Illinois State Hospital System, was 44,034, approximately 75% of which was in the nine major State Hospitals, and 25% in the two State Colonies at Dixon and Lincoln. Ever since I have had any connection with the System, the figure has remained in this neighborhood — about 40,000 plus. Using old terminology, the majority of these suffer primarily from mental disease, though particularly at the Colonies, there is a ponderable number with organic nervous disease; and, of course, within the relatively crude and unexplored boundary of our present knowledge of such things, some harbor both. I think it is the laudable hope and objective of all of us having to deal with these problems, to constantly refine and enlarge that boundary so that at some distant day there may be a clear distinction between those whose aberrations are anatomico-pathological in nature, and those whose abnormalities are based upon confused or vitiated thought and psychological process. As we grope toward this objective, we have simultaneously developed therapeutic means, aimed at alteration of existing anatomical or physiological conditions, as in lobotomy and electric shock, or toward attacking the psyche, as in psychosomaticism and psychoanalysis. My subject this evening concerns my observations of these developments over the past 18 years — naturally with emphasis upon the struggle to place as many mental ills as possible upon the organic list; and with particular reference to those whose handicaps may be alleviated or cured by surgical intervention, directed toward the

nervous system. I shall try mostly to discuss the practical, rather than the philosophical side of the matter, as it applies to existing conditions in our own State of Illinois.

When I first took up my duties at the University of Illinois in September 1931, I found for myself, more or less by default, 15 beds for organic medical and surgical neuropsychological disease. This could be expanded to 18, under pressure, but couldn't be maintained at that figure for long, without hospitalizing some of our nurses, who at that time, worked 12 hour shifts, took 28 consecutive days of night duty every fourth month, and had mostly paralyzed and incontinent patients to handle, in one variant or another.

Though I had no responsibility to do so, at that time, I could see into the future enough, and the ethics and obligations of working in a public, tax-supported institution were such, that I always gave first priority to any request from any State Hospital for diagnostic or therapeutic measures as applied to any patient who could be handled on an open ward. I am happy to say that that condition has continued to obtain until the present date, and I see no prospect of it ever changing. No reasonable or unreasonable request (of which latter there have been very few, over the years), has ever been refused. I think it is a credit to the screening which takes place before a patient is institutionalized, that even our original 15 beds, were more than ample to take care of all organic cases requiring surgical diagnostic or therapeutic procedures; and still would be, for non-confined cases.

Eighteen years ago, the problem was relatively simple. Almost all the infrequent surgical cases transferred from the State Hospitals, were brain tumors, with an occasional subdural hematoma, brain abscess, malignant metastasis, or head injury. Once in a while, there would be a request

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The advice of Dr. Oscar Sugar in the preparation of this paper is gratefully acknowledged.

Address of the President, Chicago Neurological Society, May 10, 1949.

for ventriculography or pneumoencephalography, in a patient who had developed seizures, or in whom a neoplasm might be suspected; and all of these were of course re-evaluated after admission to our service, for I do not remember a single attempt to dictate our procedures. Air studies from above and below were nowhere near as frequent then as they are now, nor as well interpreted; myelography and angiography were not done, any sort of operation for epilepsy in the absence of a gross organic lesion, was looked upon askance, and the various mutilations of the brain now grouped under the title of psycho-surgery, were unheard of, except in Portugal. The fact remains, that in a short space of time, they have all been very much heard of, and we must face that fact and plan for it, with respect to our State Hospital System.

First — as to the surgical *diagnostic* procedures. Perhaps the most important recent advance in this field, is that of angiography. A few years ago, some of us, myself included, felt this would turn out to be a risky procedure, restricted to suspect aneurysms and occasional other special cases. Now, though some small risk in its use is undoubtedly present, it isn't enough to prohibit our using it in a constantly expanding number and type of patient, so that I actually find that our resident staff will more often than not, perform angiography first, and think about air studies later, even in probable space-occupying lesions. And why not? During the past year alone, I have seen several such cases, in which air studies would have indicated a deep left-sided sub-cortical tumor, a short history suggested a malignant lesion, and we might well have contented ourselves with decompression and roentgen therapy, had not angiography clearly revealed a medial sphenoid wing meningioma, which we could remove. As our knowledge of interpretation grows, I can well visualize this procedure as giving us invaluable diagnostic information in many types of brain conditions other than tumor and vascular anomalies and occlusions — some of them producing the mental deterioration or aberration, which has resulted in Institutionalization by the State.

Still of equal importance to angiography, are the air studies now in common use for more than twenty-five years. As everyone knows these can be prepared, either from above, by operation, or

from below, by lumbar puncture. And lastly, there is myelography, which, of course, would have only limited use in the State Hospital System.

Now what should be our attitude toward the performance of any or all of these procedures, in the State Hospitals? Theoretically, anything is possible given the proper equipment, and the man with the knack, experience, and constant practice to carry them through properly. We should be practical about this, however, and realize, that rarely, in the indigenous staff of the hospital, is there anyone meeting these qualifications. And why should there be? The men there are primarily psychiatrists, some of them are secondarily neurologists, and none is a surgeon, with his necessarily mechanical talent.

Therefore, procedures, such as angiography, are probably not suitable as State Hospital maneuvers, for many years to come, except in special instances where the equipment and trained team is available and an experienced man can be brought in from the outside. Ventriculography should, of course, never be performed in the absence of facilities to proceed with a major brain operation. And even pneumoencephalography in properly selected cases, has its risks.

Of these surgical diagnostic tests, therefore, I would say, that aside from the use of lumbar and cisternal puncture, which is universal and self-understood, the only one which is suitable at the present time, is pneumoencephalography. Myelography is not necessary often enough to justify the expense of equipment and development of technique, ventriculography should never be done without readiness to proceed with a brain operation for tumor, etc., and I have already shown that there are not enough of these to justify decentralizing them; and arteriography is still in too infantile and specialized a state to justify its contemplation for general use — though I have great hopes for it in the future.

Even pneumoencephalography has its very definite restrictions, which are too often not understood, even by experienced residents who have seen considerable neurosurgery. In the first place, it should not ordinarily be done if intracranial pressure is increased. Secondly, it should not be performed in thrombotic cerebral vascular conditions, because, on occasion, it may greatly increase the extent of the thrombosis and

the resulting neurological deficit. Yet, I have seen it performed without any preliminary pressure measurement, and even without a funduscopic examination.

Pneumoencephalography should not be performed by anybody, unless he knows its indications and contraindications, has a working knowledge of cerebro-spinal fluid dynamics, and can properly interpret the resultant x-ray plates. I see no reason why these requirements may not be met by selected competent staff members of the individual State Hospitals.

Now we come to the matter which has changed the picture during the last several years, as far as *therapeutic* neurosurgery is concerned. As I have said before, tumor and hematoma surgery, the occasional cortical extirpation for hyperkinesis of various sorts, and the infrequent tractotomy or chordotomy, are no problem, for they are easily centralized for handling, as they always have been, and they do not require special restraint facilities. Perhaps, in the future, some decentralization to certain of the hospitals may be possible, where there is a nearby certified neurosurgeon; but I doubt that the expense will ever be justified, nor do I feel that the operation itself or the after-cure, no matter who the surgeon, can ever equal that supplied at a place where this kind of work is done all the time.

The matter of the various semi-empiric operations on the grossly normal brain, which have been developed and have come into use in recent years, is a different problem, however. Whether we like these operations or not, and I intrinsically shrink from them, we have to concede that they, thus far anyhow, have proved of some value in some types of psychoses, in drug addiction, in intractable pain, in anxiety states, and experimentally, they are even being extended to certain forms of epilepsy, as to the psychomotor variety, and perhaps eventually, to chronic alcoholism. The patients harboring these conditions, are largely of the necessarily confined variety, the psychiatrists who study them, understandably wish to be able to continue to study them after their operations, the relatives often do not like to move them, and anyhow, there are presently no centralized facilities of consequence, for handling them. Therefore, we must take stock of this, until we eventually come to a stable

criterion for permanent evaluation of these procedures.

I do not see any hope of doing this, except at selected sites. At the present time, there are very few of these, and none is really a going concern, in the proper sense, unless you want to take the extremely limited facilities of the Illinois Neuropsychiatric Institute into account or those in private hospitals. I hope that while the State waits for the development of such facilities in its Hospital System, the psychiatrists, in their impatience, will not start reaching for the nearest ice-pick. No insult or discourtesy to them is intended in saying this, anymore than I would have a right to feel affronted by any statement coming from them about my ignorance of the field in which they have been specially educated. After all, any mutilation of the brain, is an attack upon the soul as well as upon a crucial portion of the body, and the hands into which this is entrusted, should not lack in competence and training.

As a matter of fact, I do not think we know enough about this whole subject, over a long enough period of time, to justify our going so far overboard just yet, as to assume that such facilities should be routine in every institution, nor will be, for many years, perhaps never. Let us develop adequate surgical conditions in a few places, where it can be done well, by competent men, and then let us be patient, and see what it all means. Certainly, it is going to mean something. We all know that. But how much cannot even be guessed, at present. Perhaps, as we keep on training droves of neurosurgeons, it *will* be possible to outfit every Institution. And just as likely, it may settle down to a point where everyone will be happy enough to have one or two centralized places for these procedures. It has been suggested to the authorities, and it wouldn't take too much initiative, or cost inordinately, to institute the simpler procedures, carried out by competent men, at such centers as Elgin, Chicago State, Manteno and Peoria. Whether action will be taken, I do not know, nor do I know whether an acute mental hospital or two will be built, where these things can be done by the best men, under uniform conditions. Meanwhile, for one, I do not feel at all unhappy that we are going a bit slow, in the State of Illinois.

The Treatment Of Ante-Partum Hemorrhage

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For the purposes of this presentation the term, "ante-partum hemorrhage," will have to be understood in a somewhat limited sense. We shall confine our discussion to bleeding which occurs during the third trimester of pregnancy and further to those instances which are due to the commonest causes of such bleeding, namely placenta praevia and premature separation of the normally implanted placenta. Together, these two complications represent one of the greatest hazards which beset the paths of the expectant mother and that of her unborn child.

Improved awareness on the part of the lay public of the importance of adequate pre-natal care has led in recent years to a great reduction in maternal and fetal mortality due to such causes as toxemia, malnutrition and unanticipated cephalo-pelvic disproportion. The ever-increasing availability of antibiotics and chemotherapeutic agents has served to decrease the toll of life claimed by infection in the expectant, parturient and delivered patient. One result of these improvements in obstetric management has been to focus our attention more and more clearly upon hemorrhage as a cause of maternal and fetal morbidity and mortality.

As pointed out by Scott,¹ "hemorrhage remains one of the three great destroyers of women in childbirth, and is far less amenable to prophylactic measures than either puerperal sepsis or the toxemias of pregnancy". Much may be done in advance to lessen the incidence of infection during and after labor; careful adherence to the principles of pre-natal care will be rewarded with less frequent occurrence of the toxemias. Even in the case of post-partum hemorrhage we may, by careful avoidance of unnecessary trauma, lessen the frequency of occurrence of that complication. But in ante-partum hemorrhage pro-

phylaxis is of little avail and, in consequence, a thorough understanding of the underlying principles of its treatment becomes correspondingly more important.

Most recent writers upon the subject have recognized three divisions of time in their analyses of the treatment of ante-partum hemorrhage. Eastman,² for example, in discussing the treatment of placenta praevia (and the statements apply with comparable truth to premature separation), speaks of the period 1896-1919 during which vaginal delivery without blood transfusion was the dominant method of treatment; the period 1920-1934 when vaginal delivery with moderate use of transfusion was most frequently employed; and the period 1935-1944 when caesarean section supplemented by liberal blood transfusion was used in the majority of cases.

It is a well attested fact that the more recent period, which has seen the wide acceptance of caesarean section and of early and frequent replacement of blood, has produced a striking improvement in statistics. In the case of Eastman's² analysis, for example, he was able to show a reduction in maternal mortality from 13.8% in 1919 to 0.9% in 1944 and a reduction in stillbirths for the same periods from 63.1% to 23.4%. It should, however, be noted that there occurred at the same time an increase in neonatal deaths from 15.4% to 23.4% — a fact which may perhaps be attributed to a point which will be discussed later — namely, the increased reliance upon caesarean section in the treatment of bleeding has resulted in a marked increase in the number of premature and immature infants delivered.

Whether the improvement in maternal and fetal salvage has been due more particularly to the increased use of the caesarean delivery or to the greater availability and more ready use of blood replacement and to reduction of infection through chemotherapy and antibiotics is at least debatable. During the late thirties and early forties the literature produced a veritable av-

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Presented before the General Assembly, 109th Annual Meeting of the Illinois State Medical Society, Chicago, May 17, 1949.

alanche of statistics from clinics all over the country which sought to show that any patient who bled during the last trimester of pregnancy should have her pregnancy terminated forthwith by caesarean section. So widespread was the acceptance of this principle that in some maternity services the incidence of caesarean section reached the level of 5-6% of total deliveries.

It has seemed to us, however, that the adoption of caesarean section as the standard treatment of ante-partum hemorrhage is not without certain distinct disadvantages. In the first place, our choice of abdominal delivery will, in many instances, probably commit the woman to similar delivery in subsequent pregnancies, so that we may be exposing her to the risk of not one but several abdominal sections. Or, if subsequent delivery be by the vaginal route, she will at least face the risk of labor with a uterine musculature weakened by scar. In the second place, as was mentioned earlier, the routine use of caesarean section in delivering the patient who bleeds, undoubtedly leads to a considerable increase in the number of premature infants and a consequently higher proportion of neo-natal deaths. Finally, it must be recognized that not all instances of vaginal bleeding are due to placenta praevia or to premature separation. Johnson³, in his splendid article on the conservative management of some varieties of placenta praevia, quotes Dippel and Brown⁴ as follows: "As a matter of fact there were only eleven instances of clinical placenta praevia in the group, while the remaining fifteen were merely roentgenologic instances of low implantation of the placenta. There were only two cases where clinical evidence of premature separation of the normally implanted placenta was present. Therefore, if caesarean section had been routinely performed on all cases of vaginal bleeding on the assumption that they had either placenta praevia or premature separation of the placenta, that assumption would have been erroneous, and caesarean section would have been unjustifiably performed in 85.87 per cent of the cases".

All of us must realize, if we but reflect a moment, the frequency with which we see patients in labor who are bleeding more than may be considered quite normal. Despite our suspicion that we may be dealing with placenta praevia or premature separation, many of these patients de-

liver uneventfully and subsequent examination of the placenta fails to disclose any definite evidence of either of these conditions. Similarly we all encounter patients who, during the late weeks of pregnancy experience bleeding, the origin of which is never satisfactorily explained and who subsequently are delivered easily of perfectly normal infants.

It would seem, therefore, that the first and most important step in the selection of the proper means of treatment will be the making of a correct diagnosis. To this end we should avail ourselves of all possible means, utilizing all the diagnostic skill and all the auxiliary services and diagnostic aids which we may be able to command. Every patient who is suspected of placenta praevia or premature separation of the placenta should be hospitalized at once and should remain under close observation until a definite plan of treatment has been decided upon. As to what this plan of treatment will be, it is our opinion that it should be selective rather than standardized. In general, best results will be obtained if the treatment is as conservative as is consonant with the safety of the mother and the interests of the child.

It has been our practice for the past five years at the St. Louis University Hospital to admit all patients in whom bleeding occurs during the last trimester of pregnancy. Immediate typing, cross-matching, Rh factor determination and complete blood counts are carried out and if bleeding is not extreme the patient is put to bed for observation. It is our feeling that, except in those rare instances where bleeding is so severe as to constitute an immediate threat, the patient will be benefited by a "hands-off" policy which will permit time for recovery from the initial effects of blood loss. How long this policy of avoiding examination will be pursued depends, of course, upon the circumstances present in the individual case. It is rather generally recognized that in placenta praevia, of whatever degree, there will occur a period of remission during which there is no active bleeding, during which the body will have an opportunity to gather its forces, so to speak, and during which we may be able, should it seem desirable, to replace the blood which has been lost. And many cases of premature separation of the placenta, especially those lesser degrees of separation

which constitute the greater number of such cases, will likewise be benefited by being left alone for a time.

The diagnosis between placenta praevia and premature separation of the placenta is usually made rather easily from the history of onset and from the findings on abdominal examination. In some instances, however, it will be difficult or impossible to differentiate between the two when the patient is first seen. Fortunately though, this difficulty will usually arise in those instances where the bleeding is relatively slight and where there is no need for haste in instituting active treatment.

When circumstances permit, we prefer not to examine our patients with ante-partum bleeding until at least forty-eight hours after their admission. During this time repeated observations of pulse, blood pressure and fetal heart tones are made and careful estimates of blood loss are correlated with repeated blood counts to determine the possible development of significant anemia. We are in agreement with Johnson³, quoted above, who states "Procrastination must end when the total blood loss has produced a secondary anemia of such severity that further bleeding would endanger the life of the mother."

Ultimately there are available to us two basic means of diagnosis in bleeding of the sort we are here concerned with. Having utilized the carefully elicited history and the general physical examination and the laboratory findings and having exercised whatever clinical judgment with which we may be endowed, our final decision will rest upon information obtained by radiological visualization or digital examination. Both should be employed.

We have found the so-called "soft-tissue" technique of x-ray visualization of the placenta to be of particular value as a negative finding, i.e. when we are able to visualize the placenta in the upper portion of the uterus. In the same way the cystogram, when it demonstrates a fetal skull closely applied to the bladder is of some diagnostic significance though we have not been inclined to place great dependence upon the method. Recently Hartnett of our department at St. Louis University has devised a technique which involves the injection via the abdominal aorta of an opaque substance which he has been

able to visualize in the placental circulation. The method affords some promise but is technically difficult and not without certain risks. He has been able to demonstrate central placenta praevia in several cases which have been confirmed at caesarean section.

We do not permit rectal examination of any patient with ante-partum bleeding. If digital examination is to be made, it will afford more conclusive evidence if it is made vaginally — and usually with less trauma. It must, of course, be made with due regard for the special requirements which result from the special character of the case at hand. Strict asepsis and antisepsis must be assured and the examination should be undertaken only when complete preparations for delivery via either the abdominal or the vaginal route have been made. Blood and plasma for immediate use must be at hand.

We have more or less discarded, at least in our thinking, the old classification of placenta praevia as central, partial and marginal. It has long been recognized that a placenta which, at 2 cm. dilatation is central will, at 6-8 cm. be only partial. It has seemed to us that if we think of placenta praevia as either complete or incomplete at any given stage of cervical dilatation, we will then be able to choose our method of treatment by evaluating other factors such as parity, physical condition, character of uterine contraction, adequacy of the pelvis and fetal position.

In the last 9123 deliveries at Firmin Desloge Hospital, the teaching hospital of St. Louis University, there have occurred 31 cases of placenta praevia, an incidence of 1 in 294. Three fourths of these have occurred in multiparous patients. In ten instances the placenta praevia was complete; in 21 instances it was incomplete.

Complete placenta praevia is probably best treated in all instances by caesarean section. The same is true of most instances of incomplete placenta praevia in primiparae. However, in the multipara in whom it is possible to find at the internal os sufficient area of uncovered membrane to permit artificial rupture, that procedure will usually be the method of choice.

In the past five years we have discarded completely the use of the Voorhee's bag and the Willett scalp-traction forceps. Neither have we attempted the Braxton-Hicks version. We have

always been of the opinion that the latter procedure, so glibly detailed in all the standard text books, is not only extremely difficult technically but also highly dangerous. Many a patient who could have been safely delivered by simple rupture of the membranes has found herself suffering a severely lacerated cervix and exposed to the risk of intra-uterine infection while at the same time she has approached exsanguination as a result of the trauma produced during the somewhat frenzied attempts of the operator to grasp and make traction upon a fetal extremity.

Having decided that caesarean section will not be necessary, we therefore rupture the membranes and return the patient to bed under close observation. Blood loss, fetal heart tones, pulse rate and blood pressure are carefully watched. Blood replacement is available at any time it may be needed. When the cervix is fully dilated the patient is returned to the delivery room and the labor is terminated either by spontaneous delivery or outlet forceps. No attempt is made to hasten the expulsion of the placenta and packing of the post-partum uterus has seldom been necessary. By such a conservative plan of treatment we feel that we have minimized shock and infection in the mother without increasing the danger to the infant.

In those cases in which abdominal delivery seems advisable it should be undertaken only when the woman has been brought as near as possible to full term. We feel very strongly that it is a mistake and an un-necessary sacrifice of fetal life to advise caesarean section upon the mere presence of bleeding and without regard to the imminence of serious anemia in the mother whose infant is of less than thirty-four weeks gestation. It need hardly be added that the operation should be done when the patient's blood pressure indicates that she is capable of sustaining the shock and further blood loss involved in the procedure. We prefer the low cervical approach and have not found that the transverse incision affords any great improvement over the more frequently employed vertical incision.

We have performed caesarean section 18 times in the 31 cases of placenta praevia encountered. Nine cases were treated by ultra-conservative methods which involved no interference other than rupture of membranes and the use of low

forceps. Four cases were treated by version and one by insertion of a bag, all of these occurring early in the series.

There was one maternal death, a maternal mortality rate of 3.2%. Our fetal mortality rate was 25.8%.

Premature separation of the normally implanted placenta may present a problem that varies from extremely mild to highly serious. In general we have treated our milder cases conservatively, rupturing the membranes and providing blood replacement when needed. These mild cases of separation have usually progressed to easy delivery without serious incident. At the other extreme are those critical cases in which the so-called utero-placental apoplexy has resulted in extravasation of blood into the uterine muscle to such a degree as to render it incapable of normal contraction. In such a situation caesarean section will offer the most favorable prognosis. It must, however, be remembered that the operation should never be undertaken until transfusion and other supportive measures have restored the patient to a condition compatible with reasonable safety. Not infrequently when these steps have been carried out it will be found that labor has begun and has progressed to such a point that it may now be possible to await delivery through the natural passages. Most obstetricians have noted occasionally at caesarean section for premature separation that first inspection of the unopened uterus reveals a bluish-purple organ filled with extravasated blood and promising little as to its ability to contract. However, after the uterus is opened and the distention relieved by delivery of the fetus, remarkable improvement occurs and it becomes possible to leave the uterus which earlier had seemed in danger of having to be removed. In much the same way it is frequently possible by rupturing the membranes and releasing the tension to promote definite improvement in the contractility of the uterine muscle when it has been invaded by blood from an area of placental separation.

Our incidence of premature separation of the placenta was 29 in 9123 deliveries — or 1 in 365. Caesarean section was employed in 14 cases and in none of these was it necessary to remove the uterus. There were no maternal deaths and the fetal mortality rate was 44%.

In conclusion, therefore, it is our opinion that ante-partum hemorrhage should be treated by selective rather than by standardized procedures. Accurate diagnosis is extremely important in choosing the appropriate means of treatment. However, it will be advisable, except in those instances where critical anemia and continuing rapid blood loss constitute an imminent danger, to defer examination until the patient has had time to react from the initial shock.

In placenta praevia the treatment selected will depend upon the completeness or incompleteness of the praevia and upon such other factors as parity, physical condition, duration of gestation, fetal presentation and position and degree of preparation of the soft parts for labor. In those cases of placenta praevia in which caesarean sec-

tion is not elected, the treatment should be extremely conservative. The dangers involved in such procedures as version, scalp-traction and hydrostatic bagging are probably greater than the danger from blood loss when adequate replacement is readily available.

In premature separation of the placenta the treatment should be conservative except in those severe cases of utero-placental apoplexy in which the uterine musculature has been infiltrated to such a degree as to render satisfactory contraction improbable.

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Proctologic Problems of Infants and Children

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Symptoms arising from disorder or disease of the anus and rectum occur not uncommonly in infants and children. Unlike the proctologic disorders of adults, which frequently necessitate operative procedures, the most common diseases in childhood are ordinarily treated with success by medical measures. This fact makes the early diagnosis and treatment of proctologic problems in these small patients most gratifying.

The rectum has its origin opposite the third sacral vertebra and it is formed embryologically from the lower, pouching blind end of the hind gut. The anus is derived from the ascending proctodeum. Congenital ano-rectal stricture is due to incomplete fusion of the descending mesenteron and ascending proctodeum during fetal life with resulting protrusion from the rectal wall into the lumen of the intestine at a point rarely more than 1 cm. above the sphincter ani.¹

If these two processes fail to fuse entirely, the major defect of an imperforate anus results. Four varieties of congenital anomalies of the lower part of the rectum are described.²

Type 1. Incomplete rupture of the anal membrane or stenosis at a point 1 — 4 cm. above the anus.

Type 2. Imperforate anus due to persistent anal membrane.

Type 3. Imperforate anus with the rectal pouch separated from the anal membrane.

Type 4. Normal anus and anal pouch with a blind rectal pouch.

The varieties of rectal obstruction (Type 1) due to incomplete dissolution of the membranes between the hind gut and the proctodeum have been well illustrated by Patton.³

The anal canal begins where the rectum penetrates the floor of the pelvis. The mucous membrane of the anal canal is characterized by numerous permanent vertical folds or ridges known as the columns of Morgagni, and at the lower end these are connected by crescentic folds be-

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Presented before the 108th annual meeting, Illinois State Medical Society, Chicago, May 10-12, 1948.

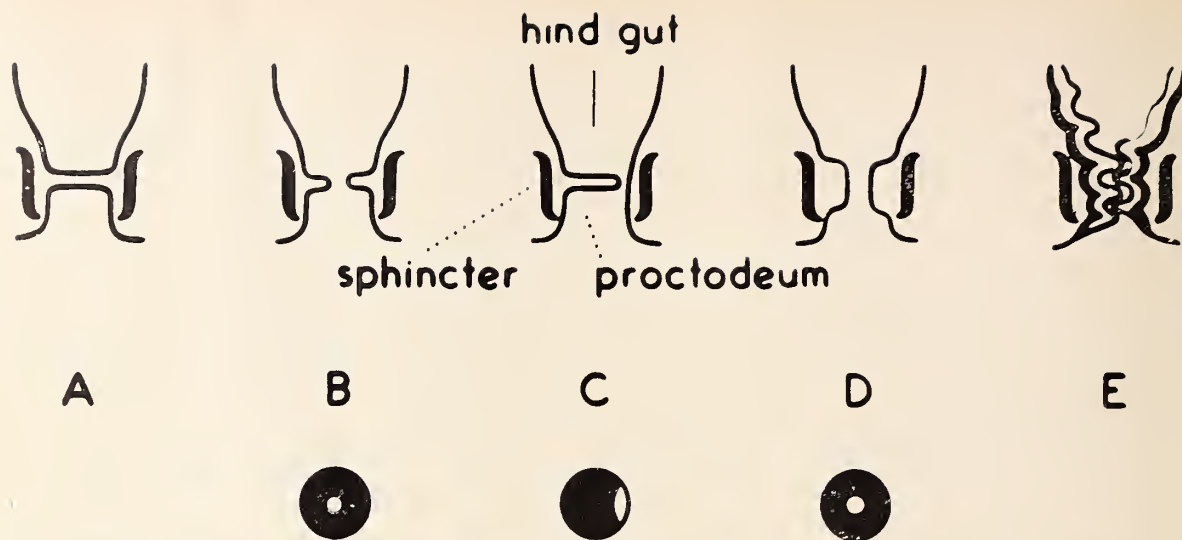


Figure 1. Varieties of Rectal Obstruction. (Courtesy of Patton, Edwin F.: *J. Pediat.* 27:532-539, Dec., 1945.)

tween which are small hollows called the crypts of Morgagni. The mucocutaneous juncture, a shallow annular depression, marks externally the junction of the skin of the perineum with the anal membrane.

The fetal rectum and sigmoid colon are lengthy, tortuous, and loop much higher into the pelvis than in later life. The infant, consequently, passes gas and stool with less ease than the adult and retention of gas, dry stools and constipation may be more frequent.

A rather frequent cause of constipation and abdominal pain in the infant is ano-rectal stricture (Figure 1). In cases where atresia and complete congenital occlusion occur, the symptoms are of intestinal obstruction and immediate surgical relief is needed. The anatomical defect of ano-rectal stricture, due to incomplete fusion of the descending mesenteron and ascending proctodeum, may vary markedly in degree and the severity of symptoms will be in proportion to the degree of stricture. This defect may exist as an iris form of membrane with a small opening or as a sickle shaped membrane. The infant may pass small, ribbon or pencil like stools, grunting, straining and becoming red of face on each occasion; prior to defecation abdominal pain may be severe. At times the stools cannot be passed without daily use of suppositories, soap stick, or enemata. These signs of ano-rectal narrowing may be noted in the first days of life but more often they become apparent after

the infant has left the hospital nursery and during his first few weeks at home. The abdominal distention and colicky pains which result from such a defect are frequent, recurrent and unrelieved by changes in formula and the commonly used medications for dyspepsia in the infant.

Diagnosis of stricture is made by gentle rectal examination with a well lubricated and gloved finger. The stricture, usually noted 1 - 2 cm. above the anal opening, is identified as a firm, wire-like ring of tissue which tightly encircles the finger. Occasionally the stricture is a thin diaphragm immediately dissolved by the examining finger. The finger should be inserted to the first joint to accomplish dilatation. The initial examination is often painful and the infant may gasp, hold his breath and then cry vigorously. Though the diaphragm is bloodless in most cases, occasionally when the examining finger is removed a small amount of blood or a blood streaked stool will follow. It is my custom after the diagnosis of stricture has been made and the initial dilation has been accomplished in the office to have the mother repeat the procedure at intervals of every other day several times at home. Dilations, except for the first, are rarely painful or difficult and as a rule only three or four such treatments are needed. The graduated infant anal dilators available commercially have not been necessary to correct this defect in our experience.

Ano-rectal stricture is a common condition and will be diagnosed not infrequently when colicky infants with persistent constipation and straining at stool are examined rectally. Undoubtedly, certain infants after varying periods of time may dilate the narrowed area or rupture a thin membrane by repeated straining and forcing of bulky stools through the stricture. This condition may exist, however, into adult life before the diaphragm is first noted.⁴ Attention has been called to the frequent occurrence of increased intra-abdominal tension due to phimosis, anal or urethral stricture, constipation, cough, and other conditions as an important factor in the development of hernia in infancy.⁵

Anal fissure is another frequent proctological disorder in infants and children. Periodic examination of the infant in the physician's office is not complete without careful inspection of the anus. Both abrasions and fissures, usually single but occasionally multiple, may occur subsequent to the passage of hard, dry stools, hard or rough particles in the stools, a fiber or hair, or from wiping with coarse materials. Anal fissure is an ulcerous lesion situated usually in the posterior commissure, occasionally in the anterior commissure and rarely on the lateral margins of the anus. Early attention to a simple abrasion may prevent the development of a fissure. Occasionally these lesions are symptomless but more often the infant cries with pain at each evacuation and occasionally streaks of blood are noted in the stool. External fissures are readily seen by gently spreading the anus apart; examination of internal lesions is simple when a small anoscope or otoscope with a large, well lubricated attached speculum is used after a cleansing enema. The pain resulting from anal fissure induces voluntary retention of stools and a vicious cycle is established. Retention produces a dry bulky stool which tends to denude the fissured area as it is passed and there results secondary infection with increase in the size of the fissure and continued pain at defecation.

Due to trauma from scybala of foreign bodies, constipation, diarrhea, or straining, the papilla and crypts may become infected with involvement of intimately adjacent tissues. This resulting proctitis appears as a bright red field of mucosa in contrast to the normal pink mucosa about it and the symptoms produced are similar

to those of fissure. Occasionally, incontinence of stools (encopresis) has been a troublesome symptom in our patients with proctitis. Involuntary stools, occurring in an infant or young child whose regular bowel habits had been well established, may be the most distressing symptom to the parents. In consideration of proctitis, the possibility of gonorrheal, syphilitic, tuberculous and diphtheritic processes must be borne in mind.

Treatment of anal fissure and proctitis may be divided into two parts. The local treatment is concerned with proper hygienic care of the affected area, applications to promote healing of the lesion and measures to obtain relief of pain at stool. The anus should be gently wiped with a soft material such as cotton after each stool. The area should then be cleansed with warm water so all particles of stool are removed from the fissure. Application of silver nitrate as solution or the stick at intervals aids healing; one application may be sufficient for small and recent fissures. The application of mild ointments several times daily protects newly formed cells and permits epithelialization. Balsam Peru (5%) in white petrolatum or a preparation containing boric acid, zinc oxide, eucalyptal, scarlet red, prepared suet and white petrolatum have been useful in most instances. Where secondary infection is marked, sulfathiazole or penicillin ointments may be more helpful. The pain at defecation will be relieved by the topical application of some anaesthetic ointment as pontocaine, nupercaine, or diothane, twenty minutes before the usual time of stool. The ointment is applied from a tube to which is attached a slotted rectal adaptor and application may be made several times daily when treatment is started. After the infant has had several movements without discomfort, the dry, bulky stools of retention stop and anaesthetic ointments will be less frequently needed. Oil retention enemas, using one to two ounces of mineral oil, olive oil, or a proprietary baby oil may be useful when administered nightly for the first few days of treatment. Occasionally, deep ulcerated fissures may require dilatation one or more times under general anaesthesia. When this or other surgical measures are necessary, the child should be referred to a proctologist.

The second part of treatment is concerned with obtaining regular, small, soft stools. The

successful healing by local treatment may be dissipated with passage of a single hard stool. In the infant, such simple measures as an increase or change in the type of carbohydrate of the formula may be all that is required. In certain cases a non-diatatic malt extract (Borchardt's Malt Soup) alone or with other carbohydrates has been very useful in the formula for correcting constipation of infants. The diets of older infants and children should contain whole wheat cereals, whole wheat bread or toast and daily serving of stewed apricots, peaches, prunes, or figs. The drinking of water should be encouraged. Often, some lubricant as Zymenol, Loraga, and Petrogalar may be necessary to establish soft stools and good bowel habits. These are administered in doses of one to three drams once or twice daily, diminishing the frequency and size of the dosage as the stools became regular and soft. Preparations which contain cascara, phenolphthalein, and magnesia magma are always contra-indicated and as stools become soft and regular the lubricants should be tapered off and finally discontinued. A regular hour for toilet and a comfortable seating device for the infant at stool are essentials in establishing good habits and correcting constipation.

The treatment of proctitis is similar to that of fissure but generally must be continued for a longer period. I have found sulfasuxidine in a dosage of two grains per pound useful in the treatment of proctitis. While this sulfonamide therapy has always been combined with the other local and general measures, the duration of symptoms has been relatively short whenever such chemotherapy was used. Moreover, the symptom of encopresis, which is often resistant to treatment in my experience, has responded more promptly when sulfasuxidine was administered. Perhaps other of the sulfonamides would be equally effective.

Peri-anal dermatitis may occur from fungus infections, infestation with pinworms or scabies, or from pyogenic infection. Fungus infection may be treated by the nightly application of one-third strength Whitfield's Ointment or with one of the newer preparations containing undecylenic acid. As the condition improves the ointments are used less frequently. Oxyuriasis is treated by the oral administration of genital violet with carbolated vaseline applied

to the anal area each night. The small patient with pinworms should wear gloves or stockings on the hands at night to prevent reinfestation when scratching occurs. Scabetic lesions in the anal area are usually associated with scabetic lesions elsewhere on the body and are treated by the general application of a scabicide from the neck down. The skin of many infants is sensitive to benzyl benzoate so the sulfur and balsam peru containing ointments may be preferred. Pyogenic infections usually respond promptly to the application of sulfonamide or penicillin ointments.

Anal fistula designates a discharging sinus or sinuses with one or more openings in the anal canal and an opening or openings either on the external surface of the body or in a neighboring viscus. The anus is usually the primary seat of the disease and with few exceptions the internal openings are in the anal crypts. These lesions are not common in children; in 1000 consecutive cases in which fistulectomy was performed at the Mayo Clinic only one patient was less than ten years of age.⁶ We have seen an anal fistula in a male infant ten months of age. The abscess of anal fistula may form and "point" in various areas; the most common is in the external tissues about the buttocks and perineum. If an abscess forms and does not rupture it should be opened when it becomes fluctuant. The treatment of "fistula in ano" is surgical and for the proctologist.

The passage of blood by rectum is a symptom for which the small child may be brought to the physician. The blood may be dark, indicating it has come from high in the intestinal tract or bright red which indicates the bleeding has occurred in the colon, rectal or anal areas. It may streak the stool or be mixed with it. A brief discussion of the causes of melena is essential to consideration of pediatric proctologic problems. Anal fissure is undoubtedly the most common cause of rectal bleeding and is usually associated with painful passage of stools. Intussusception is next most common and the melena is associated with mucus and little or no stool. The blood is small in quantity, often passed with agonizing bouts of cramp-like pain, shock occurs, and a palpable, sausage-shaped tumor may be palpated both abdominally and rectally. Roentgen examination following bar-

ium discloses a meniscus-like appearance of the barium at a point of obstruction. The commonest cause of exsanguinating hemorrhage from the intestinal tract of infants and children is Meckel's diverticulum and the hemorrhages may be small and repeated or so large as to be fatal. Other causes of melena are acute and chronic intestinal obstruction, Banti's disease with esophageal varices, polyps, dysentery, malignancy, swallowed blood from epistaxis, peptic ulcer, blood dyscrasias and ulcerative colitis. Fissure, proctitis, ulcer and polyps are visible through the proctoscope. In a series of eleven cases of polypoid lesions of the colon reported in children three to fourteen years of age, six patients also had lesions in the rectum.⁷ Lesions beyond reach of the sigmoidoscope were diagnosed by roentgen examination. Hemorrhoids may cause rectal bleeding but are very rare in childhood.

Prolapse of the rectum is a descent of one or more layers of the rectum down through the anus. Partial prolapse which involves only the mucosa is especially common in early childhood and old age. Various anatomic predisposing factors which have been suggested in the case of children are (1) the considerable volume of the rectum in comparison with the organ in adults (2) weak fixation of the rectum (3) absence of the sacral curve and (4) the high position of the bladder and uterus at birth. Prolapse of the mucosa is likely to occur with straining at stool in children who have suffered prolonged acute infections or wasting diseases which lead to absorption of fat in the ischio-rectal fossa. Other causes are diarrhea, constipation and polyps.

The condition, while insidious at the start, may occur frequently later. Recently prolapsed tissue is pink and moist but in long standing cases it becomes red and edematous and purple when tightly compressed. Strangulation is an infrequent accompaniment but when it occurs may lead to gangrene. There is usually little difficulty in arriving at a diagnosis in prolapse cases since there are few conditions with which it can be mistaken. Intussusception presenting at the anus may be confusing but in such a situation the examining finger may be passed upward alongside the protruding mass into the rectum which is impossible in prolapse. Polyps are recognized by the pedicle.

The treatment of prolapse involves restoration of general good health by the proper medical and dietary measures and the elimination of any cause as polyps, stricture or constipation. The previously mentioned measures for obtaining soft small stools should be adopted so as to diminish straining at stool. The prolapse should be reduced after defecation and provisions made to prevent prolapse between evacuations. Recurrence between stools may be prevented by firmly strapping the buttocks together with adhesive tape. Evacuation of the bowel while lying on the side or back will diminish straining. In the event of repeated prolapse the injection of sclerosing solutions into the posterior submucous spaces by a skilled proctologist may be indicated.

Constipation which results from a disease variously designated as "congenital idiopathic dilatation of the colon", "Hirschsprung's Disease", or "megacolon" should be mentioned. Though this condition is not truly a proctologic one, the problem of obstinate constipation in the young child or infant may involve elimination of this condition in differential diagnosis. The disease is essentially one of childhood and the symptoms are obstinate constipation and a permanent huge distention of the abdomen. The thin walled abdomen, dilated superficial abdominal veins and the pattern of bowel loops visible on the abdominal wall are characteristic findings in these children. Rectal examination usually discloses a large mass of doughy stool and the dilated colon is well demonstrated by roentgenographic studies following a barium enema. Until the past few years, both medical and surgical treatments were generally regarded as unsatisfactory. More recently there have been reported most encouraging results with the cholinergic drugs.⁸

A somewhat similar problem is seen in those children with a greatly elongated colon (dolichocolon). These patients with the long and tortuous colon, however, show less abdominal distention and no dilation of the large bowel when roentgenographic studies are made.

Occasionally in a child with history of long standing and obstinate constipation the only finding is a greatly dilated rectal ampulla which is readily identified by the examining finger. This situation may result from repeated failure to observe the sensation of rectal distention by

stool or, in other individuals, there may be a disturbance of rectal innervation with absence of the sensation from distention. Whatever the etiology, treatment is with measures which prevent constant rectal dilation by stool masses. A program to promote soft stools of small bulk is essential in correction of this condition which has been noted not infrequently. Results of treatment in this group are not highly satisfactory in many instances.

Diseases of the rectum and anus are not uncommon in infancy and childhood. Fortunately, in most instances, early diagnosis and proper medical treatment will eliminate the necessity of surgical procedures for their correction. With few exceptions diagnosis of these conditions can be made by the physician from physical examination in the office.

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The Management of Vaginal Discharges

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The diagnosis and management of vaginal discharges constitute a common office procedure in gynecology.

In recent years the methods of diagnosis and treatment have advanced. There are numerous causes for leukorrheas, however, we are going to discuss four of the more common varieties, (1) trichomonas, (2) monilia, (3) condyloma acuminata and (4) chronic cervicitis.

Trichomonas vaginalis is probably one of the more common causes for vaginal discharge. At the Cook County Hospital gynecologic clinic about 25% of all cases of vaginitis are of the trichomonas type. The common subjective symptoms are those of pruritus, soreness and acquired dyspareunia. Examination usually re-

veals a yellowish, bubbly discharge and a reddened vagina and vulva. The hanging drop, consisting of normal saline and a small amount of the vaginal discharge, will present the motile trichomonads. It is a simple office procedure for establishing the exact diagnosis and does not require straining.

The management is divided into two phases: (1) prophylactic and (2) active. *Prophylactically* the woman is taught proper toilet hygiene. After defecation the wiping of the anus must be done from forward, backward; never from backward forward, because of possible contamination of the vagina by fecal deposits. The patient should avoid handling the vaginal tract with unclean hands; also not to use an enema tip for vaginal douching.

Whenever an enema is taken the patient should try to avoid the bed pan splash by placing a pledget of cotton in the vagina.

Actively: Twice weekly the vagina and labia are washed with Liquid Detergent (P. D. &

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Presented before the 108th Annual Meeting of the Illinois State Medical Society, Chicago, May 10-12, 1948.

Co.). One part to two parts of warm water. This will remove the discharges and debris and will expose the vaginal mucosa to the full action of the medicament. When the vagina is dry and with the speculum well opened we insufflate 2-4 grams of a powdered mixture consisting of pulverized argyrol 20% ; B. Lactose 40% and Kaolin 40% (Argypulvis A. C. Barnes & Co.).

Avoid blowing directly into the cervical canal during pregnancy because of the possibility of air embolism. The patient is given a sanitary napkin which she wears day and night to avoid staining her clothes. At home she is instructed to take nightly an acidifying douche (2 tablespoons of white distilled vinegar to 2 quarts of warm water) after which she inserts a capsule (Argypulvis) deep into the vagina. To facilitate the dissolving of the capsule, instruct the patient to perforate each end of the capsule three times with a safety pin and to dip it into hot water for a moment or two. The patient is checked at the office once or twice weekly depending on the severity of the case. At each office visit, the hanging drop is examined for the quantity of trichomonads, so as to judge progress. If the case persists and does not respond readily or recurs after a complete cure, look for foci of reinfection. In the male the prostate, prepuce, bladder and urethra may be the sites. In the female check her Skene's ducts, endocervix, Bartholin gland, rectum, and urinary bladder. The location and treatment of the sites of reinfection are an integral part in the management of trichomonas vaginitis.

Monilia or yeast vaginitis is another annoying cause for leukorrhea. It constitutes probably about 8-12% of causes for vaginal discharges. Patients complain of leukorrhea, pruritus and vaginal soreness. Physical findings reveal white-grayish plaques adherent to the vaginal mucosa. When these are wiped away capillary oozing will be noted.

It is often seen during pregnancy and in diabetics due to the increase of glycogen in the vaginal mucosa. The diagnosis of monilia is made by means of a hanging drop technique. The typical mycellia are readily seen in a high dry magnification.

The management is both prophylactic and active.

Prophylactically the same as given for trichomonas vaginitis. We have seen several cases among those who masturbate.

Active treatment is carried out during pregnancy. We have done this for many years and have not seen any ill effects or infections from this regime.

The vulva and the vagina are washed with liquid detergent as mentioned under trichomonas. After drying, the cervix, vagina and labia are painted with a mixture of 1% aqueous acriflavin and 1% gentian violet. The patient takes a sodium bicarbonate douche at home (2 tablespoons to 2 quarts of warm water). The prognosis is good; but during pregnancy the condition is stubborn and requires frequent office visits to keep the patient comfortable. After the baby is born there is often a spontaneous cure of the condition. The office treatment for monilia is given daily and often after a few treatments there is marked improvement.

Condylomata acuminata constitute a lesser offender but is not uncommon. These lesions vary in size, shape and location. Condylomata or papillomata are usually encountered on the vulva, perineum, para anal regions or intravaginally. If in doubt as to diagnosis a biopsy is advisable.

The treatment consists of the application of a hydrosorb base ointment containing 25% podophyllin directly over the condylomata. One must be certain to protect the normal surrounding tissue with either vaseline, collodion or zinc oxide ointment.

The podophyllin ointment *must* be washed off with soap and water 4-6 hours after the application, otherwise marked reactions follow manifested by edema and tenderness. This treatment is effective only in the soft type of papilloma, and does not affect the fibrotic type. The medicament is irritating and possibly leads to vasoconstriction of the blood vessels and ischemia of the tissues; the tumor shrinks and falls off. This may be repeated once a week if necessary.

Chronic cervicitis is a frequent cause for leukorrhea. It is seen in all ages, but is especially common in the child bearing woman. It is present in almost all multiparous women, and is due to trauma to the cervix sustained during labor. A routine biopsy is indicated in cases of erosion or eversion, prior to canterization. Each year

one or two cases of group one, early carcinoma of the cervix is encountered which appears grossly as an inflammatory lesions.

A simple nasal tip electro-cautery is employed to destroy the hyperplastic endocervical epithelium and the glands. The procedure is divided into two distinct phases: the endocervical cauterization, and the destruction of the ectropion or eversion. Both of these are done at the same sitting. The former is most important because the pathology begins here while the latter (eversion or erosions) is mainly secondary. Only "cherry red" heat is used to avoid deep penetration with possible resultant hemorrhage, fibrosis or stricture of the canal. The patient returns at weekly intervals for dilation of the canal; a simple probe, uterine dressing forceps or a cotton applicator is used. This prevents a possible

leukometra, hematometra or pyometra.

Douching and sexual congress is not recommended for the next 10 to 14 days while the slough is still attached. The complete restoration of the cervical epithelium takes about 8 to 10 weeks. If further cauterization is necessary it should be delayed for three months following.

SUMMARY AND CONCLUSIONS

1. A brief clinical discussion of the diagnosis and management of trichomonas, monilia, condyloma acuminata and chronic cervicitis is presented.
2. Emphasis is placed on routine biopsy of all erosions and eversions prior to cauterization.
3. *LET NOT* the age of the patient dissuade one from taking a biopsy for microscopic study.

Intensive Treatment of Psychoses. Factors Influencing Improvement and Relapse

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The following paper does not claim to present any new and original theories concerning intensive treatment. It is the purpose of this short review to discuss the statistics and results of those treatments as they were given in our hospital in 1948 with some added remarks and practical considerations.

Both insulin and electric treatments are subject to criticism from several points of view; however, not all the criticism is entirely justified. Before all, we all know that we are dealing here with therapeutic measures, the theoretical basis of which is at least not entirely clear. All the explanations for both kinds of treatments are hardly sufficient for all the observations connected with them, and besides this none of these

theories is generally recognized by all the psychiatrists. Those theories of intensive treatments we can basically divide in two main groups, namely the somatic and the psychological theories. It is true that there is a lot of resourcefulness and even ingenuity in some of those theories which were partly built up by the inventors of those therapies, partly by those who applied and modified them later. On the other hand, none of those theories is entirely free of controversy, and as for the two main groups none of those would be sufficient when used exclusively, at least not at the present stage of our knowledge. There cannot be much doubt about the importance of some specific physico-chemical factors. We cannot deny the psychological factors either. However, it is generally recognized that none of those factors would have the same effect when the other group would be entirely missing.

Presented at the annual scientific meeting of the Physicians' Association, May 19, 1949, in the Palmer House.

So at present we have no other way but to accept the presence of combined psychological and somatic factors. The recognition of the fact that the psychological factors in those cases are useful when connected with a basically physico-chemical set-up, on the other hand hardly can be used as proof for the somatic origin of the diseases in which the therapy is more or less effective. Practically we are dealing here with an empirical therapy which contributed until now very little to our basic knowledge concerning those diseases where we used it. Schizophrenia, manic-depressive psychosis and involutional psychosis, the three main fields of intensive treatment, still remain of unclear etiology, regardless of the possible improvement on the basis of treatment.

One of the objections to the extensive use of insulin and electric treatments, the belief that they are dangerous, is less justified gradually. Nevertheless, we know that the use of insulin is still connected with possible dangers. Most of those, of course, may be avoided by using proper indication, by exclusion of unfit cases and by adequate nursing and medical supervision. As for electric shock treatments, its dangers are certainly exaggerated, since we all know that severe complications are extremely rare, and even the age limit has been extended to a higher age during the last few years. The fear of permanent organic brain changes as caused by those therapeutic methods is hardly justified, at least in the large majority of the treated cases.

Several well-known psychiatrists, among others the well-known analysts Brill and Fenichel, are using sharp criticism against the so-called shock treatments. They object to them on the basis that those somatic methods may lead to a possible negligence of the psychological aspects of personality which is the basis of our modern psychiatry. However, even if we recognize fully the importance of the dynamic aspects of personality, the objection to shock should be more against its indiscriminate and exclusive use than against its use itself. We cannot disregard the fact that we are in a position to achieve some improvement in some cases where we have no other practical way which can be used on a mass basis to reach the same results.

Contrary to those psychological objections, Kalinovsky, one of the greatest authorities in this

field, denies that psychotherapy would play any role in the improvement of cases who are on shock treatment. The experience in our hospital, just as in many other places, shows that psychotherapy still may be considered as an important adjuvant during and especially after intensive treatment. The idea of some analytically-minded psychiatrists that those cases of psychosis in a large number would show marked improvement on plain psychotherapy has its own weak points. There are some theoretical, analytical contradictions to the use of deep analytic psychotherapy in the case of psychosis, and at any rate this method as it is suggested by Federn and Rosen would require a thorough-going modification of analytical treatment which is still not worked out entirely, and even if we would accept its efficiency in some exceptional cases it still would appear impossible to apply it in a large number of cases. Although we are in doubt about the practical applicability of that over-emphasized psychotherapy, we still believe that analytically-minded and common-sense psychotherapy is of great importance for the success in intensive treatment, and its more intensive use could bring probably still better results. There is little evidence for the statement of several psychiatrists that shock treatments would result generally in the adjustment of personality on a much lower level than before. There are certainly cases better adjusted after treatment than ever before.

An objection, somewhat more justified than the previous ones, is that in so many cases it does not help or helps temporarily only. It is necessary here to do a relative evaluation of success. The new ways of treatment, such as fever, sleep, carbon-dioxide and many others, are not so far yet that they could be used as standardized mass methods at present. Nor can we give definite opinions about brain surgery. The papers about it are controversial, both as for its theory and its results. At any rate, the surgical treatment of psychosis hardly could replace the older ways of treatment at present entirely, and probably most psychiatrists still would not advise cutting and destruction of neurons without previous attempts to make use of more conservative methods.

It is certainly not easy to decide in psychiatry in what case would we consider a patient as completely recovered, and so it is a difficult task to

evaluate how far we reach it by any therapy. Since the entire intensive treatment is not yet fifteen years old, even in the best cases we better should speak about far-going improvement than about recovery. And just what is the main criterion for improvement? Basically still the mental examination by the psychiatrist. Although behavior may be one of the important factors, we hardly can identify entirely improved behavior with true mental improvement. A more objective basis for our judgment is supposed to be given by the diverse psychological tests. Many psychiatrists, however, are in doubt if the psychometric tests are really much more objective than simple mental examination. The most highly praised personality test, the Rorschach, as we know, is not founded on a generally recognized theoretical basis, and at any rate it is too much dependent on the psychologist who is giving it in order to be used in a large number of cases as the main measure of improvement. The following statistical data did not make use of systematic psychometric tests, which, however, certainly would be worthwhile to be done, since those tests may be of value for a comparison in some cases.

Another way of judgment is that based on social improvement. We are in no doubt about it that the social factors need much more exact investigation. A practical point of view is the question how far those treatment cases were able to go home and stay at home. We have to know, of course, from the beginning that our patients' staying in the institution or going home is based on a combination of psychological and social elements, and we are unable to evaluate exactly the first without knowing more about the latter.

One of our most urgent practical questions is how far we would be able to decrease the population of our state hospitals by means of intensive treatment. In order to understand better this question let us mention a few numbers concerning our hospital population. In the last fiscal year there were the following changes in the population of Chicago State Hospital.

About 2,400 (2,347) new admissions, about 800 (803) of them being voluntary, and nearly 1,600 (1,544) committed. About 2,400 (2,353) patients were discharged in the same time, about 1,000 (986) of them received absolute and nearly 500 (473) conditional discharge. About 700

(712) patients died, and nearly 200 (182) patients escaped. Our present population is close to 5,000 (4,934), more than 2,300 (2,308) males and less than 2,700 (2,626) females.

The three groups of the so-called psychogenic psychosis, schizophrenia, manic-depressive and involutional, which may benefit from intensive treatment, constitute together between 35 and 40%, somewhat more than 1/3 of all our admissions. So even if those treatments could be applied in all those cases this still would mean a very slow effect on the decrease of our hospital population. As far as insulin and electric treatment was applied in the cases of organic brain disease, alcoholics, neurotics, psychopaths and other borderline groups, its result did not amount practically to anything. So in spite of using a symptomatic therapy only, we still may deal with at least partially specific influence on the psychosis.

In 1948, which is only partly identical with the previously mentioned last fiscal year, we have the following facts concerning treatment in our hospital. 415 patients received intensive treatment, 396 of those electric shock, 145 insulin; 126, the greatest part of the insulin cases, received before or afterward electric treatment, too.

In other words, in this widespread extension of our intensive treatment, somewhat less than 10% of the hospital population or nearly 20% of the new admissions received it. Considering the large number of the untreatable re-admitted and returned old cases among the admissions, actually hardly any case with an indication remained without treatment. From the beginning we see several obvious factors influencing the outcome of treatment. Not all the cases received a full course, and we cannot share the opinion that treatment should be given only until symptomatic improvement is achieved. In most cases we attempted to reach a certain number of treatments. For practical reasons, as in many other hospitals we attempted to reach 40 times the mesencephalic state, so-called comas, on insulin, while we know that several psychiatrists are pleading for 50 deep comas. Less than 30 comas we hardly can consider as complete treatment. Altogether, only 12 insulin cases were treated incompletely, partly on account of complications, partly on refusal of the family or the patient to permit further treatments.

The number of electric convulsive treatments, so-called shock, we standardized at 20 in schizophrenics and at 15 in affective psychoses. At present several psychiatrists advocate a much higher number of electric treatments. Cases with an indefinite number of electric treatments, so-called maintenance treatment, which is not generally recognized, we did not include in our present statistics. Reasons for early interruption of electric treatment were similar to those on insulin. The number of those cases who received incomplete treatment only was 12 on insulin and 36 on electric cases, so less than 10% of the total number.

As for those minor complications which occurred during the course of therapy, we are sure that their number still could be diminished by proper care, although it is questionable if they ever can be avoided entirely. The age variation in our cases was between 14 and 57 on insulin and up to 75 on electric shock. Nevertheless, there is no doubt about the increased risk of insulin at the age over 40 and of electric shock over 50, while the application of intensive treatment on adolescents was not connected with any special danger. In spite of some serious complications of insulin which are not too rare, none of the insulin-treated cases died. This fact is due to a great part to our nurses, who are few in number but excellently trained in this specific field. At present of all the cases treated with insulin in 1948 there is only one in the acute hospital with a possible lung abscess, a not entirely clear complication of insulin, while all the others, regardless of their mental status, are in excellent physical condition.

The well-known complications of electric treatment rarely result in permanent deformity, and the large number of electrically treated cases is in excellent physical health. However, there is one case in 1949 not included in the previous statistical group with a dislocation of the upper cervical spine leading to a partial compression of the spinal cord. This rare complication occurred in the case of an unmanageable and very combative patient and was caused apparently by hyperextension after treatment, and it is not entirely clear to me if those rare serious accidents, just as the more frequent minor ones, could not be diminished even more by means of more supervisory personnel.

Six patients who received electric shock treatment in 1948 are no more alive. It is not easy, however, to see a direct connection between treatment and death. One woman died of cancer of the uterus, another of uremia, both several months after completion of electric treatment and apparently without connection with it. The other 4 patients who died all belong probably to the same group of patients. Their mental illness started acutely with very vague symptoms. They were brought in after sitophobia in a catatonic and dehydrated condition. Electric treatment was given once or twice as a desperate attempt to make them eat; usually they did not get a convulsion, the treatment did not change much their condition, and they died within a few days afterward. What is the difference between those unfortunate cases and the large number of those who improved so greatly on the same treatment? The partial answer is the degree and duration of the dehydration. Apparently there is a reversible and an irreversible stage of it, and once the patient reached the latter stage nothing could help anymore, neither electric shock nor parenteral fluids. There is, however, another explanation still possible. In the large collective group of schizophrenia, a smaller group of more clear-cut toxic organic conditions may have been included. There was something common among all those cases; young age, acute beginning — by the way, 3 of those 4 were colored people — and they all did not react to electric shock with convulsions. There is the possibility that some cryptogenic organic condition produced metabolic products which may have heightened the convulsion threshold. Post-mortem examinations did not reveal any definite findings, and certainly it is not easy to find a direct connection with the application of electric treatment. It could be worthwhile to examine those cases with laboratory methods and especially with EEG. The use of EEG is, however, of questionable value at the present stage of our knowledge, since the lack of cooperation and, even more, the possible use of sedatives, would disturb the results. Some new ways should be found to clear up those malignant cases of catatonic shock-resistant psychosis.

And how is the situation of intensive treatment cases concerning their stay in the state hospital? As mentioned before, 290 females and 125 males, together 415 patients, received

one or both kinds of intensive treatment in this one year. The distribution among the two sexes is not hard to explain. While the females in this area represent the main outlet for the psychotics, this is not the case with the males, a large number of psychotic males in the Chicago area going to Veteran's units. The still larger number of male admissions is reached by the much higher percentage of alcoholics and the somewhat higher percentage of general paresis among male admissions. Besides this, the larger number of female treatment cases is partly due, of course, to the higher percentage of affective psychosis in the female sex, while schizophrenia generally does not show too much difference between both sexes. In spite of the fact that still many more males are admitted than females, the state hospitals, besides the general tendency of slow increase in the general population, show very often another tendency: the increase of the female population. One of the chief causes for it is the large number of voluntary male alcoholics, most of those returning home again, and the returning rate of this male group is not equalled in number by any female group.

Concerning their stay in our hospital, we have the following numbers in the before-mentioned treatment cases. Among 125 men who received treatment, 53 are still in the hospital. Two died, as mentioned before, and 70 did not return to the hospital. Sixty men of those are still at home, 6 were deported to other states, and the fate of 4 escapers is still unknown. All those data are taken between 6 and 18 months after completion of treatment, so on average 12 months afterward. Examiner is conscious of the fact that this time is much too short for drawing far-going statistical consequences, since it is well known that many more cases would still return several years after completion of treatment. Nevertheless, there is no doubt about saving not only several months of hospital stay for a number of cases who received intensive therapy but even for their staying home much longer in a larger number of cases.

According to their generally larger number, the figures concerning the female treatment are more convincing. From those 290 women treated in the same period of time, 105 are still in the hospital, 4 died, as discussed before, and 181 did not return to the institution. 164 among

those are still at home, 13 were deported, and the fate of 4 escapers is still unknown.

So our statistical data are the following. From 415 patients treated within a year, including nearly 10% of the cases treated incompletely, 158 are still here, while 6 died for various reasons, apparently not as direct complications of treatment. From those 158 patients who are still here, 41, or 35 women and 6 men, were already at home and returned to the hospital within the first year. Let us consider first those apparent failures of treatment, the 158 who either never went home or returned so soon. Opinions concerning failures in intensive treatments we find in the interesting book of Hoch by himself, by Wortis and Kalinovsky. They agree that the most common causes of failure are incomplete treatment and its use in cases without proper indication. We have to consider the latter factor as very frequent in the state hospitals, where many patients are treated out of mercy in desperate cases, on pressure of relatives or in order to reach some symptomatic improvement and better hospital adjustment. It is not easy, of course, to decide in this improperly indicated treatment group how far a symptomatic improvement was reached. Some of those cases, however, still were unable to leave the hospital, mainly because of their family and social situation. At any rate, 105 among those 158 were considered from the beginning as having a very poor treatment prognosis, and so only 53 could be declared as real more-or-less-complete treatment failures.

Those 41 patients who were at home and returned soon need special consideration. In the out-patient clinic of the Chicago State Hospital I had the occasion to follow up most of the cases who were released after treatment. This part of the work was done with the help of Mrs. G. Wilson, one of our very able social workers. Not all the released patients can be followed up, of course, by our social service. Some never show up in our out-patient clinic, some cannot be checked sufficiently, and altogether we have a much better control over the cases on conditional than over those on absolute discharge. Those two groups are close to, although not identical with, the groups of committed and voluntary patients. We cannot evaluate here this difference between the two groups. However, we all know

how insufficient is our checking on the voluntary patients. It is depressing to see the unfortunate social situation in the great majority of our released patients as it is presented in the social service reports and in the out-patient clinic.

224 patients, that means 60 men and 164 women, released after treatment are still at home, which means more than 50% of all treated patients, and this in spite of the fact that more than 25% of all the treated patients, as described before, did not promise much improvement from the beginning. In other words, since only 310 patients could be considered as cases fit for treatment and among those 224 are still at home, that means that more than 2/3 of the treated patients did not yet return. So we cannot deny, even if the number of recoveries is very questionable, that we have a large number of improvements and especially social improvements. As we discussed before, intensive therapy, even on this large scale, hardly could be a major decisive factor in the decrease of the population of the institution.

And now those 41 patients who went home after treatment and returned soon. Does it really mean that they had true relapses and the success of treatment was of very short duration only? Closer observation certainly proves that the very unhappy social and environmental factors were of paramount importance, and so we observed exogenous rather than endogenous relapses in the mental conditions of those patients.

Those 41 cases were checked thoroughly. Among the 6 returned men, 1 was married and 5 single. The marriage of the first was unhappy and poorly adjusted, and the 5 single men never made an independent adjustment. Most of those patients were admitted several times before treatment, and besides this, in each of those cases there was some special unfavorable environmental and social factor present. Conflict with father, over-protective mother, abnormal fixation on the sister, rivalry among brothers — all variations of Oedipus situation with pathological outcome played a role in their life, in one case even a marked hatred against a step-father, a kind of Hamlet situation.

Similar and other factors played a role in the 35 female patients who were treated, improved, were released, relapsed soon and returned to the hospital. 12 of those were single,

and 23 were married. Again several of them were admitted before. Three of those cases were true psychopaths who were never really fit for treatment. The women who were married lived in an unhappy marriage without exception. One was a widow, 7 were divorced or separated, 9 in the group have children. The psychological factors in the female cases were similar to those in the males with some modifications. Marked Electra complex, jealousy between sisters, early death of parents, especially loss of mother, and living with other relatives were parts of their lives. With only one exception they all lived in extreme poverty. In several cases there was a marked struggle amounting to court proceedings between father or mother and husband. Several of those cases followed a certain well-known pattern: the woman, a housewife, in a good remission, taking care of the household and several children, and the husband, an alcoholic, in nearly all those cases brutal and without emotional understanding. The patient sometimes was torn up between husband and her own family. In most of those patients, the sexual maladjustment was obvious. In two of the returned patients, the married woman remained a virgin after several years of marriage. Frigidity was without exception.

In those cases of returned patients we found in the majority one more mentally ill person, in the minority two more mentally ill people in the same family. Besides the possibility of a hereditary constitutional factor, a somewhat controversial issue, we hardly can overlook the psychological and social importance of another mentally ill person in the family. This situation probably played as great a role in the relapse as in the original pathogenesis of the psychosis.

SUMMARY

1. Intensive treatment of psychosis, insulin and electric and very often a combination of both, is still of great importance in the state hospitals. In spite of their failures and shortcomings, it is worthwhile to apply them, especially in the most active cases of psychogenic psychosis. 2. Although those treatments are certainly more symptomatic than etiological, in a large percentage of cases they resulted in far-going improvement, amounting very often to the return of the patients to their home. 3. treatment and lack of proper indication. All therapy itself and to a great part to incomplete

Causes of failures are only partly due to the these statistical results show only little deviations in various state hospitals. 4. None of those cases who stayed in the hospital or went home really received afterward systematic and continued deeper-going psychotherapy. Psychotherapeutic attempts following intensive treatment were of short duration only. The results may still improve by more systematic and complete psychotherapy. 5. Environmental and social factors cannot be estimated highly enough. A large number of patients could not go home after treatment more because of an unfavorable social situation than on account of a poor mental condition. All the cases who were at home for a short time only and returned soon were showing an unusual accumulation of the worst social factors. 6. A true depopulation of state hospitals hardly could be achieved by the increase of

the number of treatment cases. This situation may be improved by a family-care program on a large scale, especially following treatment.

The various methods of intensive treatment, at present mainly on an empirical basis, are attempts to influence favorably both the psychological and the biological constituents of the human psychobiological unit. However, it is a requirement of our modern dynamic psychiatry that proper psychotherapy should be more closely integrated with the present physico-chemical treatments. It would be advisable on the basis of recent trends in psychiatry to consider human beings not only as psychobiological but actually as socio-psycho-biological units. So it appears essential to influence favorably the basic and truly pathogenic social and environmental factors of the individual patient in order to achieve deeper-going and more-lasting improvements on a larger scale.

THE ROAD AHEAD

Specialization has been constructive in bringing about better medical care. The general practitioner can properly and adequately take care of 90 percent of the needs of his community. There is nothing wrong with the public relations in a community served by general practitioners or family doctors. The family doctor is the one to whom the patient should go. He will know if and when the patient needs the help of a specialist and what kind of a special-

ist is needed. When the patient runs around from specialist to specialist, he thinks he has been under the care of a half dozen doctors, when in fact he has not had any. The general practitioner should hold the lines and referee the matter, correlating and coordinating, which the patient cannot do.

Excerpt, The Road Ahead, Frank L. Chenault, M.D., Decatur, Alabama, The Journal of the Medical Association of the State of Alabama, September, 1949.

CASE REPORTS



Coarctation of the Aorta and Aortic Insufficiency

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Though the co-existence of coarctation of the aorta and aortic insufficiency, the latter on a basis of congenital bicuspid aortic valve or acquired disease, is not rare, these entities are overlooked frequently. In Abbott's series of 183 cases of coarctation of the aorta, bicuspid aortic valves were found in 50. Nelson's Medicine cites a series of 200 cases of coarctation of the aorta coming to autopsy, in which 51 were found to have bicuspid aortic valves. Other medical texts also attest to the frequency of these two conditions. In this case, findings consistent with coarctation of the aorta and aortic insufficiency

were readily observed, yet despite innumerable medical examinations both were overlooked.

L. S. O., a 25 year old white male, was first seen at the Veteran's Administration Regional Office for a pension examination March 10, 1948. The following history was obtained from the examinee and previous service records. He enlisted in the service of the U. S. Coast Guard January 9, 1942 and was accepted after an authorized waiver was obtained for mild hypertension; the blood pressure was 150/90. He was asymptomatic at the time of enlistment and on January 8, 1945, after another complete physical examination was recorded as essentially negative, except for a blood pressure of 140/90, was declared fit for sea duty. On August 4th, 1945, while on shore duty in Naples, Italy, he was found unconscious, after being beaten severely, sustaining facial laceration and bilateral ocular ecchymoses. One week later, he suddenly developed a severe, spontaneous expixaxis for which

From the Medical Service, Veterans Administration, 366 W. Adams Street, Chicago, Illinois. Published with the permission of the Branch Medical Director, Veterans Administration, who assumes no responsibility for the opinions expressed or conclusions drawn by the authors.

From the Florsheim Heart Clinic, Northwestern University Medical School.

he was admitted to sick bay. Despite nasal packings, the epistaxis continued unabated, and he was transferred to an Army General Hospital, where he received 4 blood transfusions before the bleeding ceased. After 4 days of hospitalization, he was discharged back to duty. Aboard ship, daily blood pressure readings were determined, which fluctuated between 150-170/80-95. He was then returned to the United States, and on January 7, 1945, was given a disability discharge, with a diagnosis of arterial hypertension.

For the next 26 months, he continued to work as a carpenter and felt well, except for slight fatigue after a day of heavy work. During this period of time, he was under the care of several physicians who were seeing him once monthly and treating him for hypertension.

On March 10, 1948, he reported to us for pension examination as instructed. Examination revealed a well-developed individual who offered no physical complaints. Observation of the neck revealed moderately marked carotid pulsations; otherwise, the general physical inspection was negative. Blood pressure readings in the upper extremities were 190-210/110. The radial pulses were regular, full and bounding, with a rapid drop after the systolic phase. Palpation of the shoulders and scapular areas did not reveal any abnormal pulsations. The apex was localized in the 5th. intercostal space, 2 cms. inside the left mid-clavicular line. On auscultation, a loud, grade 4, blowing diastolic murmur was heard maximally in the 4th. interspace at the left sternal border. This murmur was transmitted down to the apical area and up to the base. It began immediately after an accentuated 2nd. aortic heart tone and reached a crescendo in mid-diastole. The blowing diastolic murmur was heard also in the back, just below the inferior angle of the left scapula. Palpation of the femoral arteries revealed the pulses to be diminished markedly in intensity. Blood pressure readings were 136/82 in the lower extremities.

A chest roentgenogram revealed notching of the inferior borders of several ribs, marked dim-

inution in the size of the aortic knob and slight enlargement of the left ventricle.

Following this examination, the following diagnoses were established: 1. Coarctation of the aorta. 2. Aortic insufficiency. The diagnosis of the former was readily established from the findings of hypertension in the upper extremities, marked decrease of the pressure in the lower extremities, and the x-ray findings of notching of the ribs and marked diminution in size of the aortic knob. The aortic insufficiency was then considered to be the result of a congenital lesion. The examinee denied any history of venereal infection and never had a rheumatic infection. The Wassermann test was negative. These facts eliminated the possibility of it being on an acquired basis. Since statistically, it is not uncommon for a bicuspid aortic valve to be associated with coarctation of the aorta, the congenital aortic valve defect as the etiologic factor of the insufficiency is the most likely explanation. It is also more tenable to explain the co-existence of these entities on a single etiologic basis, congenital cardiovascular anomalies, than to postulate a combination of factors.

In brief review, this case is presented because of the interesting co-existence of two congenital cardio-vascular entities, and because these conditions existed undetermined despite repeated physical examinations, during and after service, without either being properly established.

(Since this article was submitted for publication, a second, similar case was examined by the authors in Sept. 1949.)

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PATHOLOGY CONFERENCES

EDWIN F. HIRSCH, DEPARTMENT EDITOR



Presentation of Two Cases

Philip W. Graff, M.D.

CANCEROUS MELANO — BLASTOMA OF THE EYE WITH VISCERAL METASTASES

A 62 year old white woman entered St. Luke's Hospital for the first time on December 7, 1948 and died January 8, 1949. Two years prior to admission her left eye had been removed because of a tumor. For six months prior to the operation she had had pain and redness of the left eye and following the operation until her admission to this hospital she complained of anorexia, malaise, and weight loss. About six months before admission she developed persistent back pain, and two months before, an abdominal mass was palpable. She also complained of episodes of nausea and vomiting which had lasted several weeks, and edema of the ankles for a few days.

The patient was emaciated and dehydrated. The left eye was absent and there was no evidence of recurrence of the tumor within the orbital

cavity. The right eye reacted normally and the funduscopic examination was essentially normal. The blood pressure was 108/70 mms. of Hg., the temperature was 98.6°F., the pulse 92 and the respirations 20 per minute. The heart was normal. The abdominal examination revealed no tenderness, rigidity or distension but the liver was markedly enlarged. There was pitting edema of the ankles. The blood had 4,020,000 erythrocytes and 9,950 leucocytes per emm. and 12 grams per cent of hemoglobin. Of 100 leucocytes 24 were lymphocytes, 7 were monocytes, 59 were neutrophils, 6 were band forms, 3 were basophils and 1 was an eosinophil. The clear, dark amber, acid urine contained no albumin or sugar, but melanin was demonstrated by chemical tests. The urinary urobilinogen was 6 mgms. per 24 hours. The blood Kahn test was negative. The blood non-protein nitrogen was 38 mgms. per cent and the blood chlorides 504 mgms. per cent. The alkaline phosphatase was 16.1 Bodansky units and the cephalin flocculation in 24 hours was a trace and in 48 hours was plus 2. The blood sedimentation rate was 25 mms. in one

From The Henry Baird Favill Laboratory of St. Luke's Hospital, Chicago.



Figure 1. Photograph illustrating the extensive metastatic cancerous melanoblastoma of the liver.

hour. On the 11th hospital day the alkaline phosphatase had risen to 25.6 units. The total quantitative bilirubin was 3.7 mgms. per cent with a direct of 1.9 mgms. and an indirect of 1.8 mgms. per cent. The thymol turbidity was 5 units and the quantitative urobilinogen 1.26 total Ehrlich units. There was no bile in the urine. On the 17th hospital day the blood urea nitrogen was 34 mgms. per cent, the non-protein nitrogen 82 mgms. and the creatinine 2 mgms. per cent. The blood phosphorus was within normal range. The total quantitative bilirubin had risen to 6.6 mgms. per cent with a direct of 3.5 mgms. and an indirect of 3.1 mgms per cent.

The patient was given cannabis and morphine for pain. She ate poorly and had episodes of vomiting. Her condition became progressively worse, she became weak and lethargic and needed increasing amounts of morphine for relief of pain. She died on the 21st hospital day. The clinical diagnosis was metastatic melanoblastoma of the liver (primary melanoblastoma of the left eye).

The essentials of the anatomical diagnosis of the necropsy are:

Old surgical enucleation of the left eye (cancerous melanoblastoma);
 Extensive metastatic melanoblastoma of the liver, the biliary lymph nodes and the skin;
 Ascites;
 Slight left hydrothorax;
 Edema of the ankles;
 Marked emaciation;
 Generalized icterus;
 Multiple subepicardial petechial hemorrhages of the heart;
 Multiple petechial hemorrhages of the skin of the abdomen and thighs;
 Senile nephrosclerosis of the kidneys.

The body of this emaciated and markedly jaundiced white woman weighing 100 pounds had numerous blue-black nodules ranging to 8 mms. in diameter in the skin of the upper portion of the back over a region 14 by 15 cms. There was a marked generalized icterus and numerous petechiae of the skin of the abdomen and thighs. The left eye was absent and there was no local recurrent tumor. The abdomen contained 1500 ccs. of clear, dark yellow fluid. The urinary bladder was distended with dark brown urine

which reacted strongly to the ferric chloride test for melanin. The huge liver weighed 4775 grams. (Figure 1) The lower edge of the left lobe of the liver extended 14.5 cms. below the tip of the xiphoid in the midline. The lower margin of the right lobe of the liver in the right anterior axillary line extended 14 cms. below the costal arch. The lower edge was rounded. The liver tissues were almost black but in the right lobe was a wedge-shaped region, slightly elevated, 20 by 13 cms. with some brown liver tissue and grey nodules, that ranged to 5 mms. in diameter, along with blackened tissues. The remainder of the liver, especially the left lobe was markedly blackened and in the right lobe were black and grey nodules that comprised most of the tissue, but with some intervening brown liver substance. The capsular surface was nodular but beneath in the blackened tissues were residues of brown liver substance and also nodules of grey and spongy brown tissue ranging to 1 cm. diameter. The tissues on surfaces made by cutting were firm and elastic. The lobular pattern was entirely obliterated and throughout were blackened nodules that ranged to 1 cm. in diameter. In the right lobe corresponding to the wedge-shaped region described were nodules of black or grey and others grey with a smudge of black. The biliary lymph nodes were a blackened tissue mass 4 by 3 by 0.8 cms. Surfaces made by cutting were firm black tissues. The pancreas weighed 60 grams and was coarsely lobulated. There was no obstruction of the common bile or pancreatic ducts. The portal vein, the superior and inferior mesenteric veins were not unusual. The spleen weighed 50 grams and was 8 by 5.5 by 2.5 cms. The capsule was slate grey and wrinkled. On surfaces made by cutting the spleen was firm dark red tissues with a coarse filigree of trabecular markings. The Malpighian bodies were distinct. The suprarenal glands were not unusual. The right kidney weighed 100 grams, and was 11 by 5.3 by 3.3 cms. The capsule stripped with slight resistance from a finely granular, tan-brown surface with a few small cortical retention cysts. The dark brown cortical tissues were 6 mms. wide. The pyramid tissues were grey-brown and ranged in height to a maximum of 18 mms. The cortical markings were distinct. The renal pelvis and ureter were not unusual. The left kidney weighed 95 grams, and was 11 by 5 by 3.5 cms. The left kidney was

similar to the right. The right pleural space was partially obliterated by scattered fibrous bands between the lung and the chest. On the left side there were fibrous bands between the apex of the lung and the chest. Behind and below were approximately 150 ccs. of dark yellow fluid. The left lung weighed 300 grams. The tissues were emphysematous and mottled slightly with carbon. The lining of the pulmonary veins was smooth and glistening. The lining of the pulmonary arteries had slight fatty and fibrous changes. The lining of the bronchi was hyperemic and in the lumen was a small quantity of blood-tinged fluid. On surfaces made by cutting, the lower lobe was moderately hyperemic. The right lung weighed 230 grams. The right lung was similar to the left. The pericardial sac and epicardium was smooth. On the front of the heart was a small amount of edematous fat tissue. There were multiple petechial hemorrhages beneath the epicardium. The myocardium was brown fibrillar tissue with moderate cloudy swelling. The coronary arteries had fatty and fibrous changes but the lumens were widely patent. The thyroid gland weighed only 5 grams. The lateral lobes were about equal in size, 2.7 by 2.2 by 1 cms. Surfaces made by cutting were tan-brown thyroid tissues separated into irregular nodules by grey-white fibrous tissue. The brain weighed 1425 grams. The dura was stained yellow with bile. The cerebro-spinal fluid was clear and bile tinged. The leptomeninges and brain had no noteworthy changes. The paranasal sinuses, the venous sinuses of the dura and the ear cavities were not unusual. Microscopic examination of the grey-white nodular portions of the liver tissues had solid masses of cancerous melanoblastic cells in a fine fibrillar stroma, arranged in dense cords and alveolar aggregates. The cells varied somewhat in size and shape but most of them were large and had an oval vesicular nucleus and considerable pale, finely granular cytoplasm. A few scattered cells contained a large amount of brown granular pigment. Other nodules had spindle-shaped cells, some also containing brown granular pigment. The histologic preparations from the blackened portions of the liver tissue had large masses of tumor cells arranged in mosaics and cords, and small aggregates. The tumor cells varied considerably in shape but most tended to be elongated or spindle shaped (Figure 2) arranged in whorls

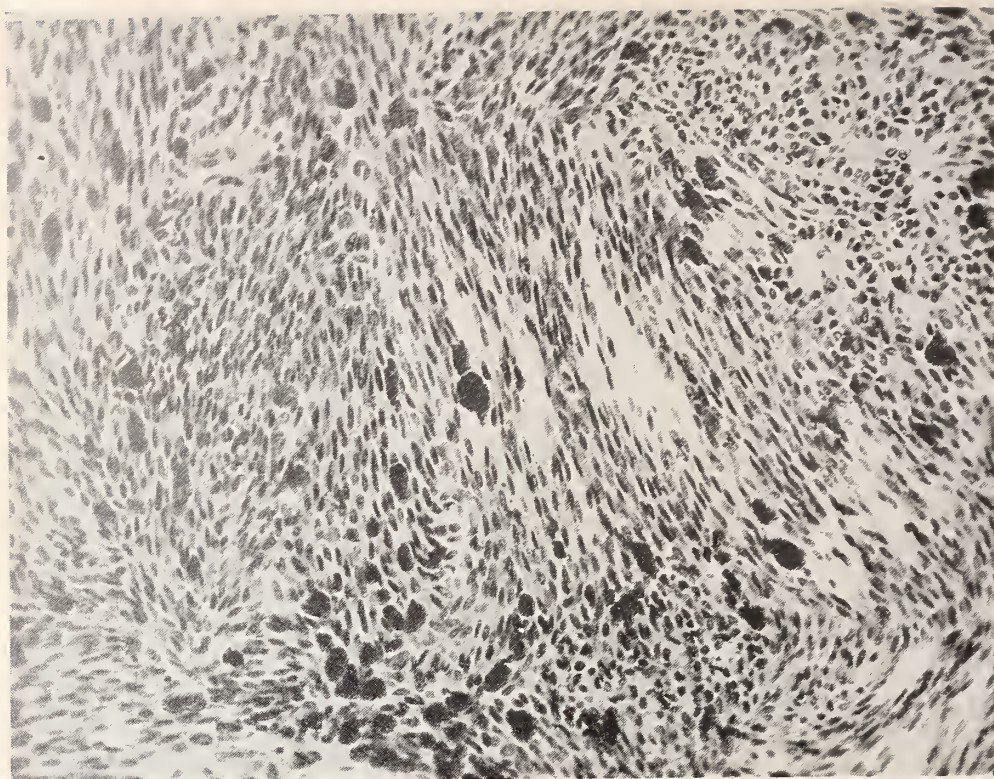


Figure 2. Photomicrograph illustrating the spindle cell structure of the cancerous melanoblastoma.

in a variable amount of fibroplastic stroma. They contained small and large amounts of brown granular pigment. Other oval-shaped cells had an abundance of pigment. The biliary lymph node tissues were partially replaced by a fine fibrillar stroma with masses of tumor cells containing variable amount of brown granular pigment. The thyroid gland histologically also contained microscopic masses of tumor cells.

COMMENT

Intra-ocular cancerous melanomas occur about equally in males and females, more frequently in the fifth and sixth decades, and rarely in children. The tumor may arise from any part of the choroid, the ciliary body or iris. Hematogenous metastasis is a great hazard and may develop from a small unsuspected tumor apparently confined to the eye. Metastases may occur into any tissue and may not manifest their presence until many months or even years after removal of the eye. The liver is a common site of metastasis, is usually extensively involved and becomes huge. This patient is in the age group in which intra-ocular malignant melanoblastomas occur most frequently. Her subjective symptoms were apparently present but a few weeks before her eye was removed, yet metastases had already occurred.

ECLAMPSIA IN A THIRTY-TWO YEAR OLD MULTIPARA

This 32 year old white female, a para II and gravida IV, entered St. Luke's Hospital for the 5th and last time on March 28, 1949. She died on March 29, 1949. The patient was seen at St. Luke's Hospital in 1943 when she had a spontaneous miscarriage at 4 months' gestation which was followed by a dilatation and curettage. In 1944 and in 1947 the patient had normal deliveries without complications. Except for some morning nausea for several months, the prenatal course of her last pregnancy was uneventful until March 5, 1949, about 2 months before the expected date of delivery. At this time she developed edema of the fingers and her blood pressure was 140/50 mms. of mercury, having been 110/70 the month before. The urine contained 5 mgms. per cent of albumin. She was placed on a low salt diet, a limited fluid intake, phenobarbital and restricted activity. Two weeks later the blood pressure was 126/74 mms. of mercury and the urine was normal. She had no complaints. The patient gained a total of 17½ pounds. She was well until the day before admission when she awoke at night complaining of abdominal discomfort, and had some nausea and vomiting. About 4 hours later the patient



Figure 3. Photograph illustrating the hemorrhages and necrosis of the liver.

had a convulsion, which was thought by the husband to be a fainting spell. In the next four hours 4 more convulsions occurred before the attending obstetrician was called. She could not be aroused from her last convulsion and was brought to the hospital.

She was in the 7th month of pregnancy and unconscious when admitted. The temperature was 98.2°F. rectally, the pulse 88 and respirations 12 per minute. The blood pressure was 180/120 mms. of mercury. The head, neck and chest examinations were essentially normal. The uterus was the size of the 7-month gestation. No fetal heart tones were heard. There was a slight bloody show. The reflexes of the extremities were normal. The bloody urine, with a Ph of 6.0, contained more than 2000 mgms. per cent of albumin and microscopically large numbers of casts of several types were seen. A later urine specimen contained a trace of sugar and a 2-plus acetone.

Shortly after admission the patient had a convulsion. She was given oxygen, magnesium sulfate, morphine, sodium amytal, sodium pentothal and hypertonic glucose. After the first stage of labor lasting 6 hours, she delivered a slightly macerated stillborn male fetus and the placenta. Her blood pressure was 190/130 mms. of mercury, the pulse 88 and respirations 14 per minute. The patient never regained consciousness. The urine output decreased markedly. Despite extensive supportive therapy the patient became worse. She became markedly cyanotic and respirations ceased. The clinical diagnosis was eclampsia.

The essentials of the anatomic diagnosis of the complete necropsy are:

- Extensive focal and hemorrhagic necrosis of the liver — eclampsia;
- Puerperal uterus — abruptio placenta;
- Acute nephrosis and ischemia of the kidneys;
- Edema of the brain;

Blood-tinged cerebrospinal fluid;
 Marked hyperemia of the leptomeninges of the brain;
 Edema of the scalp, the hands, the legs and the perirenal and superior mediastinal fat tissues;
 Bilateral hydrothorax;
 Hyperemia and submucosal hemorrhages of the lining of the large and small bowel, the right renal pelvis and ureter and the urinary bladder;
 Hemorrhages of the perirenal fat tissues, ligamentum hepatoduodenale and gallbladder.

The body of this adult white female weighing 125 pounds had slight edema of the scalp, of the hands and the lower extremities below the knees. There were recent contusions and hemorrhages of the lower lip. The uterus was palpable 10 cms. above the symphysis pubis. The mammary glands were hypertrophied as with pregnancy and had dilated ducts containing a milky secretion. The abdomen contained an estimated 500 to 800 ccs. of a blood-stained fluid in the various recesses. The uterus extended 13.5 cms. out of the pelvis, and between the horns was 9 by 10 cms. The cavum of the uterus was filled with a huge blood clot, which was attached to the anterior wall and protruded from the external os. Surfaces made by cutting the myometrium had soft, grey, hemorrhagic fibrous and muscle tissue. The ovarian blood vessels were dilated, tortuous and ranged to 1.2 cms. in diameter. The left ovary contained a large corpus luteum of pregnancy. The lower margin of the left lobe of the liver was 1 cm. below the tip of the xiphoid process in the midline and the lower margin of the right lobe of the liver was at the costal margin in the right anterior axillary line. The liver weighed 1570 grams. The lower margin was rounded and the capsule was smooth. Beneath the capsule were numerous hemorrhages, many confluent dark red centrally and surrounded by bright red more recent hemorrhages (Figure 3). The hemorrhages comprised about 75 per cent of the subcapsular surface of the right lobe and about 50 per cent of the subcapsular surface of the left lobe. Surfaces made by cutting the liver had many extensive hemorrhages. The parenchymal tissues remaining were tan-brown. The right and left hepatic ducts and common bile ducts had no changes. The biliary lymph nodes were edematous, but there was no

obstruction of the bile ducts. The pancreas and pancreatic duct were not unusual. The spleen weighed 150 grams, was hyperemic and had prominent Malpighian bodies. The thoracic duct contained blood-stained fluid. The perirenal fat tissues were markedly edematous and hemorrhagic. The right kidney weighed 170 grams and was 13 by 7 by 4.5 cms. The cortex of the kidney at the base of a pyramid was 8 mms., the corresponding pyramid was 10 mms. The deep red pyramidal tissues ranged in height to 21 mms. and the intervening columns of Bertini to 20 mms. The cortex was tan-grey and the cortical markings were diminished so that the glomerular tufts were no longer visible. The dark red-brown medullary tissues contrasted sharply with the tan-grey cortex. The right renal pelvis and right ureter had numerous submucosal petechial hemorrhages (Figure 4). The left kidney weighed 195 grams and was 13 by 6.5 by 5 cms. In all essential details the left kidney was similar to the right. The suprarenal glands were not unusual. The lining of the large and small bowel had numerous petechial hemorrhages. The pleural cavities each contained 300 ccs. of slightly blood-tinged fluid. There was a marked hemorrhagic catarrhal tracheitis and bronchitis. The right lung weighed 350, the left 260 grams. The dependent portions were hyperemic and edematous. The heart weighed 270 grams. The foramen ovale was patent through an oblique slit 2 by 1 cms. The myocardium and coronary blood vessels were not unusual. The thyroid gland weighed 13 grams. Surfaces made by cutting were tan-brown tissues moist with colloid. The lining of the upper portion of the trachea was edematous. The leptomeninges were markedly hyperemic. The cerebrospinal fluid was blood-tinged. The brain weighed 1210 grams. The brain was slightly edematous. The convolutions were somewhat flattened and the sulci correspondingly narrowed. The lining of the paranasal sinuses was edematous and the lumens contained a small amount of viscid secretion material. The lining of the venous sinuses of the dura was smooth and in the lumens was fluid blood. Cultures of the peritoneal fluid, the pericardial fluid, the pleural fluid, the heart blood and spinal fluid had no growth. The microscopic examination of the liver tissues demonstrated extensive periportal hemorrhages and focal necrosis in the periphery of the lobules.



Figure 4. Photograph illustrating the acute parenchymatous changes of the kidneys.

Beneath the thin capsule were numerous focal hemorrhages. The central veins were generally small and contained only a few erythrocytes. The sinusoids generally were narrow, some were dilated. The parenchymal cells were swollen. Peripheral and other portions of the lobules were necrotic, hemorrhagic and infiltrated with a few leucocytes. In some lobules the necrosis extended from the periphery to the mid-zone regions. The periportal blood vessels were hyperemic and about them were small hemorrhages. There were no unusual changes in the bile ducts. The liver cells had slight fatty changes. The glomerular tufts of the kidney were vascular. There were no adhesions between the capillary tufts and capsule. The lumen of the capillary loops were narrowed and contained little blood. The Bowman's capsules were thin. The lining cells of the convoluted tubules were swollen and in the lumen were granular precipitates. The lining cells of the collecting tubules were also swollen. The lumens contained masses of red

blood cells, eosinophilic granular precipitates and hyaline casts. The stroma was not appreciably increased. In the subcapsular regions were a few small focal infiltrations of lymphocytes. There was also an acute urinary cystitis.

COMMENT

This 32-year old multipara in her 7th month of pregnancy developed edema of the hands and an elevated systolic blood pressure and albuminuria. She was placed on a low salt diet, a limited fluid intake, phenobarbital and restricted activity. She improved under treatment. About 3 weeks later she had an explosive attack of convulsions with coma and hypertension. She delivered a slightly macerated infant that was thought to have been dead but a few hours. She remained in coma, and following delivery had another convulsion and developed marked oliguria. The blood pressure remained elevated. Despite supportive treatment she became cyanotic and died within 24 hours from the onset of the convulsions.

NEWS OF THE STATE



BUREAU

Fifty Year Club Member.—Dr. O. J. Flint, Princeton, was presented the certificate and insignia of membership in the Fifty Year Club of the Illinois State Medical Society at a recent meeting of the Bureau County Medical Society. The presentation was made by Dr. Joseph O'Neill, Ottawa, Councilor of the Second District.

CHAMPAIGN

Society News.—Dr. Arnold Jackson, Madison, Wisconsin, addressed the Champaign County Medical Society recently on "Hypothyroidism, Diagnosis and Management."

COOK

Branch Meeting.—"The Use of ACTH in the Treatment of Rheumatoid Arthritis" was discussed by Dr. David E. Markson, associate professor of medicine, Northwestern University Medical School, at a meeting of the North Shore Branch of the Chicago Medical Society, November 1. Dr. Max Samter, assistant professor of medicine, University of Illinois College of Medicine, spoke on "Allergy—Newer Trends in Treatment."

Society Election.—Dr. Fred Shapiro was elected president of the Chicago Orthopaedic Society at its recent meeting. Other officers are Dr. Earl S. Leimbacher, vice president; Dr. Manley A. Page, president-elect and Dr. Sam W. Banks, secretary-treasurer.—Officers of the Chicago Society of Internal Medicine are Dr. Sidney Strauss, president; Dr. Howard L. Alt, vice president and Dr. Ernest G. McEwen, secretary-treasurer.

Society News.—The Chicago Rheumatism Society was recently addressed by John R. Mote, medical director of Armour Laboratories, on "Physiology and Metabolism of the Adrenal Cortex in the Human Being" and Matthew Taubenhaus, associate

attending physician at Michael Reese Hospital, on "Endocrine Aspects of Connective Tissue Development." Officers of the Chicago Rheumatism Society include Edward F. Rosenberg, president and Stanley Fahlstrom, secretary-treasurer.

Legal Medicine.—The Chicago Medical School sponsored four lectures on Legal Medicine early in December by Dr. Leone Lattes, chairman, department of medical jurisprudence at the University of Pavia, Italy. The titles of the lectures were "Identification of Blood Stains and Secretions", "Paternity Tests", "Legal Aspects of Industrial Medicine", "Legal Medicine of Blood Transfusion."

The Jaffe Lecture.—The fourth Richard H. Jaffe lecture was delivered November 25 by Dr. Granville A. Bennett, professor and chairman of the department of pathology, University of Illinois College of Medicine, on "Reactive and Neoplastic Changes in Synovial Tissues."

Dr. Herrick Honored.—Several hundred Fellows of the Institute of Medicine of Chicago and prominent guests paid tribute to Dr. and Mrs. James B. Herrick at a reception given with the University of Chicago Press in the Institute's rooms on Monday, October 24, from 4:30 to 6:00 o'clock. The reception was held to mark the publication of Dr. Herrick's autobiography "Memories of Eighty Years."

Appointments at Chicago Medical School.—The following faculty appointments have been made at the Chicago Medical School: Dr. Israel M. Becker, instructor in medicine; Dr. Bernard E. Cohler, assistant in urology; Dr. Marvin S. Freilich, instructor in radiology; Dr. Lawrence S. Mann, instructor in surgery; Dr. Vera Perlmutter Morkovin, assistant in surgery; Dr. Laurence H. Rubenstein, instructor in thoracic surgery; Dr. S. Lloyd Teitel-

man, instructor in surgery and Dr. Philip Warsaw, assistant in medicine. Dr. Roscoe C. Giles has been appointed assistant professor of surgery at the Chicago Medical School, it was announced recently by Dr. John J. Sheinin, Dean.

Dr. Giles, who received his medical degree at Cornell University College of Medicine, has been senior attending surgeon to Provident Hospital since 1925, and alternate attending surgeon at Cook County Hospital since 1947.

Alumni Election.—Dr. F. Lee Stone, class of 1910, was recently elected president of the Medical Alumni Association of the University of Illinois for the coming year. Other officers are Drs. Edward A. Christofferson, president-elect; Walter J. R. Camp, first vice president; Fred L. Glenn, second vice president; Michael H. Streicher, secretary-treasurer and Walter E. Simmonds, necrologist. Medical Alumni Association councilors are Drs. William Plice, T. Wachowski, Franklin Wilson, H. M. Swenson, D. S. Beilin, Roy O. Riser, B. Cushman, O. Hawkinson, William Sladek, L. Wood, Charles H. Phifer and Paul Grabow. Dr. Streicher is chairman of the nominating committee; Dr. Frank Thometz and Dr. Grabow also are on the committee.

CRAWFORD

Ninety-Five Years of Age.—Dr. James M. Mitchell, Oblong, observed his ninety-fifth birthday, October 14. It is interesting that Dr. Mitchell taught in rural schools for twenty-four years before he obtained his medical degree.

DE WITT

Society News.—Dr. F. Garm Norbury, Jacksonville, addressed the De Witt County Medical Society, October 12, on "Psychosomatic Medicine."

FULTON

Dr. Davis Chosen Outstanding General Practitioner.—Dr. Ernest E. Davis, Avon, who will begin his forty-ninth year in the practice of medicine in Illinois, was chosen as Fulton County's outstanding general practitioner at a meeting of the Fulton County Medical Society, October 20. Dr. Davis, who is the son of a physician, graduated at Northwestern University Medical School in 1900.

KANE

Staff Election.—Dr. Donald Dick was elected president of the medical staff of Delnor Hospital at a recent meeting. Other officers are Dr. Norman J. Schreiber, vice president; and Dr. C. B. Weingarden, Wheaton, secretary-treasurer.

LA SALLE

Society Election.—New officers of the La Salle County Medical Society are Dr. A. F. Lenzen, La Salle, president; Dr. Thomas E. Ryan, Ransom, vice president; and Dr. Martin J. Rosenthal, La Salle, reelected secretary-treasurer.

LEE

Personal.—Dr. Gene A. Sullivan, Amboy, was recently elected president of the Lee County board of health.

MACON

Physician Honored.—Dr. C. Martin Wood, Decatur, who began the practice of medicine in 1899, was presented with membership in the Fifty Year Club of the Illinois State Medical Society at a recent meeting of the Macon County Medical Society. Dr. Wood graduated at the University of Michigan School of Medicine, 1899, and has been a member of the Macon County Medical Society since that year, serving as president since 1910.

MC HENRY

Ninety-Three Years of Age.—Dr. W. S. Eshbaugh, Marengo, celebrated his ninety-third birthday, October 7. Dr. Eshbaugh began the practice of medicine in Marengo in 1884. He was deputy coroner for fifteen years, health officer for more than forty years and served one term as alderman of the second ward.

GENERAL

Bowman Crowell Honored.—Dr. Bowman C. Crowell, Chicago, recently retired associate director of the American College of Surgeons, has been awarded the American Cancer Society's 1949 medal in recognition of his outstanding contributions to the control of cancer.

Diabetes Diet Manual Available.—The American Medical Association has just published an unusual diet manual for physicians to give to their diabetic patients. This booklet provides space for the physician to enter his individual patient's daily gram requirements in each of the main food groups: vegetables and soups, fruits and juices, breads and cereals, meats, milk, cream and butter and fats. Corresponding as well as related foods are listed according to the number of grams a patient may take and stay within his daily requirements.

Size of the manual is only 2-5/8" x 4-5/8" so that it can fit easily into a vest-pocket or purse, and it has a gray washable plastic cover without printing on the outside so that the manual may be referred to in public without attention being called to the fact that the reader has diabetes. The inside front cover has spaces for the patient's and the physician's name, address and telephone. There is an introduction for the patient and words for those who use insulin.

Single copy, \$.35; 10 copies, \$2.75; 25 copies, \$6.75; 50 copies, \$13.40; 100 copies, \$26.60. Postage prepaid.

The dietary method used in the booklet was devised by Dr. Arthur R. Colwell of Northwestern University Medical School.

MARRIAGES

CHARLES MICHAEL VAN DUYNE, Pontiac, to Miss Anna Christine Pearce, San Francisco, recently.

WALTER PINKUS to Miss Lois Ferdinand, both of Chicago, recently.

DEATHS

WILLIAM MCKINLEY ALLEN, Chicago, who graduated at the State University of Iowa College of Medicine, Iowa City, in 1928, died August 13, aged 51, of chronic myocarditis.

NORTON WEST BOWMAN, Flora, who graduated at Miami Medical College, Cincinnati, Ohio, in 1895, died suddenly October 9, aged 77. He had practiced medicine in Clay County for 55 years and was a member of the Illinois State Medical Society "Fifty Year Club."

EDWARD D. CANATSEY, Jacksonville, who graduated at Barnes Medical College, St. Louis, in 1904, died October 27, aged 70. He had practiced medicine in Jacksonville 34 years.

WILLIAM C. DANFORTH, Evanston, who graduated at Northwestern University Medical School in 1903, died November 11 in Evanston Hospital, aged 71. He was Chief Emeritus of the Department of Obstetrics and Gynecology at Evanston Hospital and professor of gynecology and obstetrics (Emeritus) at Northwestern.

LAWRENCE GARY GOULD, Lombard, who graduated at Chicago Medical School in 1941, died in Idaho Springs, Colo., in August, aged 36.

GARRETT J. HAGENS, retired, Chicago, who graduated at Northwestern University Medical School in 1891, died November 13, aged 81. He had practiced medicine in Chicago more than 50 years.

LOUIS J. HARRIS, Chicago, who graduated at the University of Illinois College of Medicine in 1906, died October 26, aged 68.

ANNA BOLENDER HINDS, retired, Berwyn, who graduated at the University of Illinois College of Medicine in 1905, died in October, aged 78, following a long illness.

DONALD W. KILLINGER, Joliet, who graduated at the University of Illinois College of Medicine in 1927, died October 18, aged 48. He was president of the Will-Grundy County Medical Society.

ADAM B. KNAPP, Belleville, who graduated at the University of Tennessee School of Medicine in 1892

and practiced medicine in Vincennes, Indiana for 55 years, died September 8, aged 87 of arteriosclerotic heart disease.

ROSCOE GENUNG LELAND, Chicago, who graduated at the University of Michigan Department of Medicine and Surgery in 1909, died at his home, October 17, aged 64, of acute coronary occlusion. In 1931 Dr. Leland became director of the Bureau of Medical Economics of the American Medical Association. During World War II he was appointed a supervisor of the consultant office in the headquarters of the AMA for the Procurement and Assignment Service for Physicians, Dentists and Veterinarians and a member of the Health and Medical Committee of the Selective Service System.

SOREN SVALHEIM NORSMAN, Chicago, who graduated at the College of Physicians and Surgeons, School of Medicine of the University of Illinois, in 1900, died August 13, aged 85, of cerebral hemorrhage.

GARRETT A. NORTON, retired, Aurora, who graduated at Rush Medical College in 1884, died October 23, aged 90. He had practiced medicine in Kane County over 50 years.

MAURICE OPPENHEIM, Chicago, who graduated at Medizinische Fakultät der Universität, Wien, Germany, District at the Frisina Hotel, Taylorville, December in 1899, died October 26, aged 73. He was professor and head of the department of dermatology and syphilology at the Chicago Medical School.

THOMAS W. RICE, Centralia, who graduated at Missouri Medical College in 1897, died October 19, aged 77.

CLARENCE OLDS SAPPINGTON, Chicago, who graduated at Stanford University School of Medicine, Stanford University, San Francisco, in 1918, died November 6, aged 69. He was consultant in industrial health, industrial hygiene and occupational diseases.

ALFRED HENRY STEPHANI, retired, Chicago, who graduated at Rush Medical College in 1886, died October 7, aged 84.

ABRAHAM JOSEPH WEINBERG, Chicago, who graduated at Rush Medical College in 1920, died August 7, aged 53, of melano-sarcoma of the jaw.

"FOR THE COMMON GOOD"

Health Talk Televised on WGN-TV.—"Peanuts, Pennies and Safety Pins" was the title of a telecast, October 26, over WGN-TV, when Paul H. Holinger, showed his collection of foreign bodies and demonstrated the procedure of removal. X-rays and instruments aided in the visual demonstration. Other telecasts in the weekly series of the Educational Committee of the Illinois State Medical Society, in cooperation with WGN-TV, were:

Danely P. Slaughter, November 2, on Maybe It is Cancer. X-rays instruments and slides were combined to tell the story.

Evan Barton, November 9, on What's New in Arthritis. In this telecast, which discussed rheumatoid and osteoarthritis, a vial of ACTH and actual hog pituitaries, lent through the courtesy of Armour Laboratories, gave visual emphasis as to why the drug was not yet available for public distribution.

Tom Jones, November 16, Visual Health Education. All known and established media used in visual health education were displayed and demonstrated through the new medium of television.

With the exception of the November 9 telecast, when Dr. Samuel J. Hoffman, director of the Hektoen Institute for Medical Research, acted as moderator, Dr. Theodore R. Van dellen appeared in this role.

Lectures Arranged Through the Educational Committee of the Illinois State Medical Society.

George M. Cummins, Chicago, The Borrowed Time Club in Evanston, November 29, on Geriatrics.

Harry M. Hedge, Lakeview High School in Chicago, November 22, on Cosmetics and You.

Rudolph Novick, Chicago Lawn Woman's Club.



When "The 'Old Look' in Mental Care" was telecast over WGN-TV on September 7, 1949 out-moded restraining devices were used. The cast (left to right): Richard H. Graff, Supt., Peoria State Hospital; Jo Linder of the Society's Chicago office; George A. Wiltrakis, Dir., medical and surgical services, Illinois Dept. of Public Welfare; Frank McGorin, DePaul University student; Theodore R. Van Dellen; and, in the crib, Pat Mahoney, DePaul student and part-time employee of the Society's office.

December 6, on Keeping Up with Your Years.

Norman T. Welford, La Grange, the Harvey Junior Woman's Club and American Association of University Women, December 12, in Harvey, on Problems of Parenthood.

W. W. Bolton, Public Health Chairman, Illinois Federation of Women's Club, in Chicago December 15, on What Health Education Should Mean to You.

Robert R. Mustell, Park Manor Woman's Club in Chicago, January 3, on The Menopause.

Alex J. Arieff, Town and Garden Woman's Club, in Chicago, January 10, on Psychosomatic Medicine.

Carl H. Hamann, Rockford, Harvard Woman's Club, January 16, in Harvard on Your Mental Health.

John L. Reichert, Woman's Auxiliary, Jackson Park Branch of the Chicago Medical Society, January 17, on Our School Health Program: A Challenge to the Medical Profession.

Charles W. Scruggs, Calumet High School PTA, in Chicago, January 18, on Superstitions About Health.

Alfred D. Biggs, Daniel J. Corkery PTA in Chicago, January 19, on Your Child's Mental Health.

Herbert E. Schmitz, Woman's Auxiliary, West Side Branch of the Chicago Medical Society, January 20, on Maybe It Isn't Cancer.

Ernest W. Gutzmer, Villa Park, Lansing Woman's Club in Lansing, January 23, on The Menopause.

Lectures Arranged Through the Scientific Service Committee of the Illinois State Medical Society:

Frank F. Maple, Chicago, Stephenson County Medical Society in Freeport, November 17, on Cesarean Section.

P. V. Dilts, Springfield, Macoupin-Montgomery County Medical Societies in Carlinville, November 22, on Arthritis.

Lindon Seed, Chicago, Sangamon County Medical Society in Springfield, December 1, on Present Treatment of Thyroid Disease.

James H. Mitchell, Chicago, Bureau County Medical Society in Princeton, December 13, on Fungus Diseases, including Differential Diagnosis.

Frank Dickinson, Ph.D., Northwest Branch of the

American Academy of General Practice in Chicago, December 16, on How Rich Are You?

Michael L. Mason, Chicago, La Salle County Medical Society in La Salle, January 12, on Crushing Injuries of the Hand, illustrated.

Postgraduate Conference in Pekin.—A Postgraduate conference was held for the Fifth Councilor District of the Illinois State Medical Society at the Pekin Country Club, Pekin, November 17, with Harold M. Camp, Monmouth, secretary of the state society, and Ralph F. Peairs, Normal, Councilor for the District, presiding, and with the Tazewell County Medical Society acting as host. The following Chicago physicians participated:

Samuel M. Bluefarb, Newer Methods in Dermatologic Treatment (kodachromes).

Lyle A. Baker, Clinical Aspects of Pericarditis, illustrated.

John W. Huffman, Cancer of the Cervix.

Frederick H. Falls, Cesarean Section.

After a social hour and dinner, John T. Reynolds discussed "Diagnostic Problems and Operative Precautions in the Treatment of the Acute Surgical Abdomen."

Conference in Taylorville.—A Postgraduate Conference was arranged for the Seventh Councilor District at the Frisina Hotel, Taylorville, December 15, with W. A. Monaghan, Taylorville, president of the Christian County Medical Society, presiding.

In the evening, the speakers were Claude E. Lambert on "Principles of Fracture Treatment," and Edwin S. Hamilton, Kankakee, member of the Board of Trustees of the American Medical Association, What the Coordinating Committee is Doing.

Both these conferences were arranged through the Postgraduate Education Committee of the Illinois State Medical Society.

and with the society acting as host. Following a luncheon, speakers included:

E. Lee Dorsett, St. Louis, "Breech Presentation and Delivery."

George A. Hellmuth, Newer Aspects of Cardiovascular Diseases.

Harry A. Oberhelman, Surgical Problems in Infancy and Childhood.

Franklin Corper, Nephritis in Childhood.

PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, DEPARTMENT EDITOR



GERIATRIC REHABILITATION

Trevor H. Howell, M.R.C.P.Ed., Physician, Geriatric Unit, St. John's Hospital, Battersea, London, Lecturer in Problems of Old Age, St. Bartholomew's Hospital, London. In *OCCUPATIONAL THERAPY AND REHABILITATION*, 27:6: 468, December 1948.

A large number of elderly patients are wrongly considered as untreatable, and therefore neglected. Yet much may be done to restore cases of apparent senility and incurable disease to relative vigour in body and mind. Complete recovery is not possible in all patients, but once a planned system of rehabilitation is in being, some surprising results can be obtained.

The first essential in treating the aged is an optimistic atmosphere. This has a greatly stimulating effect on the patient and also on the relatives. It is important to gain the active cooperation of both if real success is to be achieved. No one can do much against the patient's will. In the same way, it is fatal to keep the old people in bed and to give them sedatives. The practice should be to get them up and to keep them interested.

The practice at St. John's Hospital is to encourage as many patients as possible to get up out of bed. The question asked of any disability is not "what is wrong?" but "why can such and such a function not be performed?" All excuses for immobility are approached in this spirit and

a remedy sought at once. The results are sometimes surprising.

Although a start has been made, much remains to do in this field. The problem of contractures, for example, remains unsolved. The rehabilitation of those previously considered as incurable is going to be one of the great adventures in the future.

THE MOLE AS A POSSIBLE RESERVOIR OF POLIOMYELITIS: SUMMARY

L. E. Rector, M.D., St. Louis. In *ARCHIVES OF PATHOLOGY* 47:4:366 April, 1949.

Several reasons why the mole might be the natural reservoir of poliomyelitis are enumerated and discussed.

Miscellaneous autopsy observations and terminal behavior traits are tabulated and discussed.

Successful passage of the virus from mole to mole and from mole to Swiss mouse and cotton rat is reported. Unsuccessful attempts to pass the virus to 3 monkeys is reported.

The absence of typical histopathologic lesions of poliomyelitis in the moles and the Swiss mice and cotton rats in which passage of mole brain and spinal cord was effective is discussed, and the literature concerning similar experiences of other investigators is reviewed.

Fifteen animals were employed as controls for comparative studies of autolytic changes. die-

(Continued on page 42)

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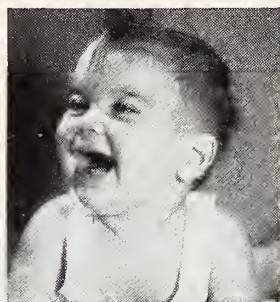
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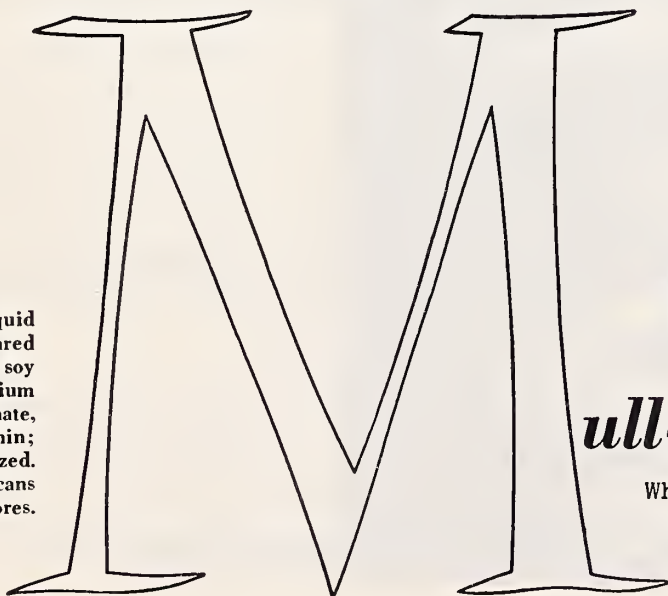
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Physical Medicine (Continued)

tary deficiency, ability of the mole's brain to respond with mobilization of inflammatory cells, trauma of handling and reaction to foreign protein.

AN ABDUCTION EXERCISE SPLINT FOR THE SHOULDER

Edward J. Coughlin, Jr., M.D., Williamstown, Massachusetts. In *THE JOURNAL OF BONE AND JOINT SURGERY* 31-A:2:438 April 1949.

In many lesions in and around the shoulder joint, abduction within certain limits is greatly to be desired. Unfortunately, this has not been possible in many instances without keeping the patient confined to bed in some form of balanced suspension. From an economic point of view, this is burdensome; and at the present time, with hospital beds at a premium, it is impossible. In an attempt to provide abduction exercises without hospitalization, the ambulatory splint was devised.

The splint consists of a U-shaped metal bar which is strapped to the body by means of cross straps, and an axillary ring on the opposite side.

In addition, there is a shoulder strap on the affected side to prevent the shoulder from being elevated during the period of abduction (fig. 1). The principle underlying the splint is very simple: Extension of the elbow shortens the rope from the elbow to the pulley (fig. 2), and by means of the sling around the elbow, the arm is brought into abduction. The degree of abduction to be obtained may be varied by shortening or lengthening the rope extending from the elbow sling to the hand grip.

ASPECTS OF PHYSICAL RECONDITIONING

Marcus J. Stewart, M.D., Memphis, Tennessee. In *THE JOURNAL OF BONE AND JOINT SURGERY* 31-A:2:349 April 1949.

Conservation of manpower and the gainful existence of the individual following orthopaedic injuries and disease are attained not so much by the restoration of function, as by continually preserving function. Thus, in the initial treatment of fractures, reduction of the bone fragments should not be paramount, but rather the

(Continued on page 46)



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The use of high protein dietaries has resulted in a gratifying reduction of surgical morbidity and mortality, made possible by systematic presurgical nutritional build-up of the patient. Through this same approach, wound healing and general recovery are greatly promoted.

In nephritis and nephrosis, at one time considered absolute contraindications for animal protein in the dietary, the use of protein in liberal amounts can significantly reduce mortality and decidedly improve the clinical condition.

The benefits derived from high-protein nutrition in pregnancy and lactation are diversified and far-reaching, embracing both mother and offspring. For this reason, a generous extra serving of meat, given daily as a routine measure, has been strongly recommended as a means of improving the health of mother and child.

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*McLester, J. S.: Protein Comes Into Its Own, J.A.M.A. 139:897 (April 2) 1949.

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Physical Medicine (Continued)

decision as to the most rapid method of restoring the whole individual to a functioning, economically solvent capacity. Surgical repair and treatment should be based on a program which will adequately immobilize the injured part, and at the same time maintain good tissue turgor and a properly functioning vascular tree, and allow early active exercise. In operative cases, it is as much the surgeon's responsibility to impress upon the patient the importance of postoperative care and proper muscle re-education as it is to employ good surgical technique. Each patient who faces more than a few days of convalescence should be given a detailed schedule of active rehabilitation,—especially a program of remedial exercises.

. . . . The ideal stepping stones to physical reconditioning of the patient are:

1. An enthusiastic desire on the part of the patient and the doctor to attain and maintain the best possible function of the affected part and of the whole body;

2. The acceptance of a program of early, active non-weight-bearing and weight-resisting exercises, religiously executed;

3. Intelligent and systematic deep breathing, with conscientious maintenance of good posture;

4. The application of heat, massage, and special apparatus in selected cases.

The doctor and the physical instructor must gain the patient's complete confidence and cooperation; the keynotes should be patience, sincerity, enthusiasm, and optimism. The patient should be taught three important phases of muscle rehabilitation: (1) contacting, (2) sustained contracture, and (3) complete relaxation. The objective should be what is commonly referred to as dynamic physical reconditioning, or dealing with the specific therapeutic need of the individual, in contrast to physical reconditioning, which refers to general calisthenics.

The relative value of health and wealth always depend on which one you have lost.

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PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, DEPARTMENT EDITOR



PROGRESSIVE RESISTANCE EXERCISES IN CUP ARTHROPLASTICS OF THE HIP

Thomas L. De Lorme, M.D., and Arthur L. Watkins, M.D., Massachusetts General Hospital, Boston. In *ARCHIVES OF PHYSICAL MEDICINE*, 30:6:367, June 1949.

Many problems are encountered in the post-operative treatment of patients with vitallium cup arthroplasty of the hip. Their solution depends in great measure on the close cooperation of the surgeon and the physiatrist. Sufficiently different sets of mechanical and functional problems are encountered to necessitate considerable variations from the routine outlined for the average case. Along with the surgeon, the physiatrist must plan an effective and flexible exercise program to obtain maximum painless function.

The rehabilitation of the cup arthroplasty patient is divided into three phases: (1) the immediate postoperative, which includes the first four weeks; (2) the ambulatory hospital period, which starts when the patient first becomes ambulatory and extends until he is discharged (for most patients this is the eighth week); (3) the convalescent or final phase, which starts at the end of the eighth week and continues until maximum function has been obtained. The important physical therapy measures employed in each phase have been discussed.

After the first month, the patient's activities

are considerably increased. Active nonresistive hip exercises are continued, and, in addition, a stationary bicycle is used for ten minutes twice daily and sometimes roller skating exercises in bed for abduction. Ambulation is initiated in a walker and graduated to crutches with minimal weight bearing, and later stair climbing. Occasionally during this period the patient may, because of joint pain or adductor muscle spasm, have difficulty in performing the hip exercises prescribed. This difficulty is frequently overcome by having him perform the exercises initially in the Hubbard tank. These underwater exercises are done three to five times weekly and usually may be stopped in two to three weeks. The average patient is discharged from the hospital eight weeks postoperatively, to carry on the same routine at home.

The patient now encounters more complex functional problems. He is allowed to bear more and more weight, refines his gait, graduating from crutches to cane and later to no appliances at all, and if necessary, redevelops inadequate musculature and attempts to increase joint motion. His crutch gait is checked at regular intervals and between the sixth and ninth month a patient with unilateral arthroplasty is permitted to bear full weight and to start the use of the cane in the opposite hand. A patient

(Continued on page 46)



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*Hollender, A. R.: Office
Treatment of the Nose, Throat
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Year Book Publishers,
Inc., 1943, p. 316.

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1,000 patients in 5 hospitals answered the same questions as follows:²

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| QUESTION #1 | YES 91% | NO 9% |
| QUESTION #2 | YES 75% | NO 25% |
| QUESTION #3 | YES 98% | NO 2% |

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1. McKenzie, C. H.: The Use of Plastic Nipple Shields for the Lactating Breast, *Journal-Lancet*, 68:199 (May) 1948.

2. Abramson, M.: Breast Feeding the Newborn, *Gen. Practice Clinics*, (Oct.) 1947, p. 318.



Physical Medicine (Continued)

with bilateral operations remains on crutches for approximately one year and is then brought to full weight bearing rapidly. One or even two canes may be used during this transition period. If at the end of the third month the hip muscles have not recovered adequate strength, progressive resistance exercises are started. Jumping exercises (in place, side to side, and front to back) also may be employed for increasing coordination and strength. Eventually when the patient is allowed to discard all appliances and bear full weight, intensive gait training is started and continued until he obtains the best possible gait for the existing hip mechanics.

Several methods for exercising each hip muscle have been presented. With proper individual case analysis and therapeutic exercise equipment, optimum exercise routines for restoring joint motion and muscle power are possible even in the most complicated mechanical situations.

Progressive resistance exercises are useful in restoring hip muscle strength in these patients; they usually are started at the end of the third month but may start earlier with minimal resistance and counterbalancing.

Progressive resistance exercises are advocated four days weekly, once daily. Each exercise is carried through thirty repetitions, which are broken up into three sets of ten repetitions each. Ten Repetition Maximums and minimums are determined weekly for measurement of progress.

Except where hindered by pain, lack of cooperation or firmly rooted habit patterns, muscle strength substantially improved in one to three months of exercise. The increased strength resulted in both objective and subjective functional improvement.

PRACTICAL ASPECTS OF CEREBRAL VASCULAR ACCIDENTS


H. Houston Merritt, M.D., Columbia University, New York City. In *NEW YORK STATE JOURNAL OF MEDICINE*, 48:2371-2378, 1948.

After recovery from the acute phase, therapy is directed toward restoration of function in the paralyzed limbs. Light massage and passive movements are begun. The patient is encouraged to use paralyzed muscles.

Unduly prolonged exercise is fatiguing and discouraging to the patient. As muscular activity returns, increasing degrees of active exercise are

(Continued on page 48)

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Physical Medicine (Continued)

introduced. As soon as advisable, the patient is allowed in a chair for progressively longer intervals. Graduated instruction in exercise and walking is begun with a view to making the patient as self-sufficient as possible.

Aphasia or disorders of speech require patience and persistent effort. Best results are obtained when reeducation is under the supervision of a trained speech therapist.

SUCTION SOCKET FOR ABOVE KNEE PROSTHESIS

Thomas John Canty, Commander (MC) U.S.N.; Robert M. Ware, Lieutenant, junior grade (MSC) U.S.N. In U.S. NAVAL MEDICAL BULLETIN, 49:2:216, March-April, 1949.

The suction socket utilizes the principle of slight negative pressure. Vacuum created in the closed bottom of the socket holds the movements of the artificial leg. No pelvic joint and belt, or shoulder harness is necessary (fig.1).

An enclosed space of about 6 to 8 cubic inches is made in the bottom of the socket between the end of the stump and the closed end of the socket. This acts as an air seal and when the leg is lifted from the ground, the air pressure in the enclosed space falls to about 2 pounds per square inch negative pressure, thus retaining the stump in the socket. An expulsion type valve is fitted into the air space to allow air to be expelled when the stump is weight bearing in the socket. No stump sock is worn.

Contra-Indications

Patients with associated injuries of the pelvis and opposite leg and injuries about the hip joint, with instability, do not use a suction socket advantage.

Advantages

The advantages of the suction socket over the conventional artificial leg are:

- (1) Greater freedom of movement in all directions, especially laterally.
- (2) Elimination of the pelvic belt and joint or shoulder harness, thus preventing break-down of these parts.
- (3) Less physical hindrance and less wear and tear of clothing.
- (4) The prosthesis is lighter and the amputees state that the "dead weight" feeling is greatly reduced and that the prosthesis

(Continued on page 50)

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Physical Medicine (Continued)

feels more like an integral part of the body.

- (5) Friction between the skin and sides of the socket is eliminated.
- (6) Elimination of stump sock.
- (7) The stump muscles hypertrophy instead of atrophy, resulting in better control of the prosthesis.
- (8) With the recommended shape and ischial seat, proper stump length is maintained and the subcutaneous fat roll, which occurs at the top of the socket with the conventional plug fit, is alleviated.

Disadvantages

Most failures are due principally to the psychologically unstable patient. The suction socket requires a most accurate fit and alignment. The amputee must learn to place his stump in the socket correctly each time he wears the prosthesis. There is a period of several weeks of ischial discomfort, under the ischial tuberosity, which gradually disappears as the soft tissue and skin in the area adjust to weight

bearing. The time required for an amputee to learn to walk is longer with a suction socket than with a conventional type leg, as observed when used on new amputees. Since the amputee uses his stump to control the limb, muscular development occurs. This requires further adjustment in the fitting of the socket by relief of stock in the socket sides in order to allow room for the increased size of the muscles.

Conclusions

1. Above-knee suction sockets can be successfully fitted in about 90 percent of above-knee amputees.

2. Suction sockets are indicated in stumps with impaired circulation because of the beneficial effects of the alternating positive and negative pressures, with resulting improvement in stump circulation.

3. In patients with extremely short stumps a suction socket provides the very necessary method of holding the stump in the socket.

Surprising bit of information from a student's autobiography: "If you're a girl it will show up in some way."

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The antihistaminic drugs "do not replace the more lasting benefit obtainable by successful specific . . . desensitization."

Feinberg, S. M.: Postgrad. Med. 3: 92 (1948).

"Apparently, desensitization treatment is still the method of choice, and the antihistaminic drugs cannot be considered as substitutes."

Levin, L.; Kelly, J. F., and Schwartz, E.: New York State J. Med. 48: 1474 (1948).

The antihistaminic drugs "are valuable additions to our armamentarium, but do not . . . supplant the specific desensitizing injections."

Brown, G. T.: M. Ann. District of Columbia 16:675 (1947).

Pollen desensitization "still remains the treatment of choice in hay fever."

Rosen, F. L.: J. M. Soc. New Jersey 45: 390 (1948).

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PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, DEPARTMENT EDITOR



OSTEOARTHRITIS OF THE HIP: TREATMENT

Alex Robinson, M.D., C.M., Banff, Clinic, Atla.
In THE CANADIAN MEDICAL ASSOCIATION
JOURNAL 60:2:161 February, 1949.

After-treatment is of great importance. A routine is established whereby the joint is daily put through its full range of movement. End-of-the-bed traction and deep pool baths are started at once, while flexion deformity of the hip, so commonly present is combated by instructing the patient in a method of hyper-extension—leaning back against the side of the bed and allowing the feet to dangle. Once a week or oftener the hip capsule is injected with 20 c.c. of 1/2% procaine, as described by Fletcher, using a Luer-Lok syringe so that this may be done under pressure. This relieves the pain and allows a greater range of movement during the routine manipulation which follows. Sciatic pain that is present may also be relieved by procaine directly into the nerve. Any areas of fibrositis are similarly injected. Infiltration of tense adductor muscles is useful in selected cases to diminish muscle spasm.

On discharge from hospital, the patient is instructed to set up a traction apparatus for himself when he goes home, and to put his hip through full range of movement daily. He is advised to wear rubber heels (to minimize jarring), keep his weight within normal limits, and to walk erect. Unnecessary exposure is to be

avoided and he should dress warmly. A daily rest period is advocated, preferably both morning and afternoon, as well as some daily exercise. If discomfort or stiffness of more than an hour's duration follows the exercise, it should be reduced.

POLIOMEYELITIS FOLLOWING TONSILLECTOMY: A REVIEW OF THE LITERATURE

Cornelius H. Nau, M.D., San Antonio, Texas. In
ARCHIVES OF PEDIATRICS 66:2:49 February, 1949.

In spite of the tabulation of many statistics showing the relationship of tonsillectomy to poliomyelitis, there have been few conclusive results derived therefrom. Review of the literature for the past six years shows several conflicting reports.

Conclusions

Conclusions which may be drawn at this time are:

1. Most reporters agree that tonsillectomy (recent or remote) does not predispose to poliomyelitis.
2. Many reporters have shown that if the disease does develop, the patient's chances of contracting the severe bulbar form are definitely increased if a recent tonsillectomy has been done.
3. In order to avoid the risk of bulbar poliomyelitis — although it is not great — operations

(Continued on page 46)



infant anorexia rapidly disappears

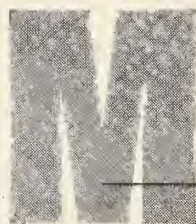


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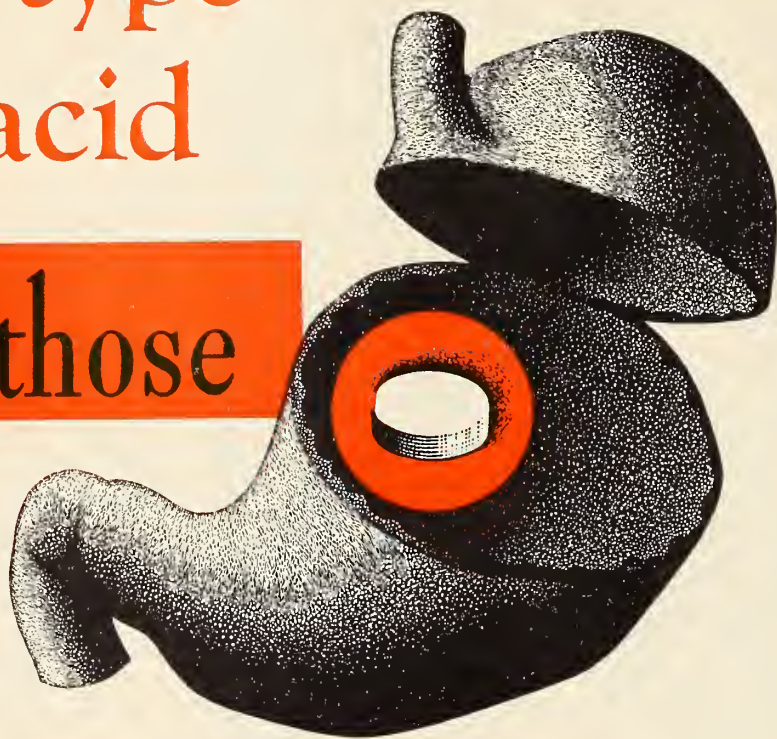
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1. *No acid rebound*—effectively inhibits acid-pepsin activity, with no secondary hypersecretion.
2. *Protective coating*—mucin-like gel is rapidly formed and clings to ulcer crater and gastric mucosa.
3. *Non-systemic*—cannot disturb acid-base balance because it is non-absorbable.

1. Brick, I.B.: *Amer. J. Dig. Dis., In Press* 2. Bralow, Spellberg & Necheles: *Scientific Exhibit #1112, A.M.A., Annual Session 1949*

(ammonia dermatitis)

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Physical Medicine (Continued)

on the nose and throat should not be done during epidemic months. However, during non-epidemic years the risk is minimal (one case in 2,000 operations). The risk from November to June is nil except in Texas and California, where the poliomyelitis season is longer.

THE CLINICAL MANIFESTATIONS OF ACUTE RADIATION ILLNESS IN GOATS: COMMENTS ON THERAPY

Eugene P. Cronkite, Lieutenant Commander (MC) U.S.N. In U.S. NAVAL MEDICAL BULLETIN, 49:2:199, March-April, 1949.

The rate of delivery of ionizing radiation by explosion of an atomic bomb in air cannot be duplicated by other means such as x-ray tubes, radium, artificial radioisotopes, cyclotrons, or a chain reacting pile because of their inadequate output and small radiation fields. A unique opportunity to study the effects of high intensity, short duration, penetrating ionizing radiations upon animals was provided by the explosion of the atomic bombs during Operation Crossroads.

Summary and Conclusions

1. Goats exposed to the atomic bomb ionizing radiations are divided into four groups on the basis of the severity of the illness and their leukocyte response to the radiation.

GROUP 1, severest radiation illness, survived less than 6 days and developed an extremely marked depression of the leukocyte count and very severe signs. Sudden death was observed. There was no visible evidence of hemorrhage during life. Epilation was not seen. The mortality was 100 percent.

GROUP 2, severe radiation illness, survived 9 to 15 days and developed a less marked leukopenia. Signs were severe but appeared less rapidly. Definite hemorrhagic manifestations with a variable clotting defect occurred. Epilation was prominent. Mortality was 100 percent.

GROUP 3, less severe radiation illness, survived in excess of 44 days. Two are alive, 1½ years after irradiation. The signs were similar to group 2 but developed with less rapidity and severity. A moderate leukopenia was present. Hemorrhagic phenomena were less prominent and a clotting defect was not found. Epilation was minimal.

GROUP 4, mild radiation illness, survived

(Continued on page 48)

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EATON LABORATORIES, INC., NORWICH, N. Y.

*Downing, J. G. et al.: *Use of 5-Nitro-2-Furaldehyde Semicarbazone in Dermatology*, J. A. M. A. 133:299, 1947 • Shipley, E. R. et al.: *Clinical Observations on Furacin Soluble Dressing in the Treatment of Surface Infections*, Surg., Gynec. & Obst. 84:366, 1947 • McCollough, N. C.: *Treatment of Infected War Wounds with a Nitrofur*, Indust. Med. 16:128, 1947 • Wawro, N. W.: *Newer Aspects of the Palliative Treatment of Cancer*, Connecticut State M. J. 12:17, 1948.



Physical Medicine (Continued)

in excess of 184 days. Six of nine are alive 1½ years after irradiation. Signs were mild and of short duration. Hemorrhage, epliation, and rhinitis are absent.

2. The clinical picture in goats exposed to atomic bomb radiation is similar to that of man except for the absence of vomiting and the more rapid progression of signs.

3. Early appearance and rapid progression of signs presages an early death.

4. Penicillin and whole blood transfusions were used therapeutically. For lack of comparably exposed control animals definite conclusions cannot be drawn about the usefulness of these agents. The data suggest that they may be of value.

PRELIMINARY REPORT ON THE TREATMENT OF ANTERIOR POLIOMEYLITIS WITH EXERCISE AND CURARE

W. D. Paul, M.D., and O. A. Couch, Jr., M.D.,
Iowa City In ARCHIVES OF PHYSICAL
MEDICINE, 30:5:277, May 1949.

With the increasing interest in anterior polio-

myelitis, the therapy of this disease has been hard pressed to keep pace with the newer facts derived from sound experimentation. The purposes of this preliminary report are, first, to review briefly some of the recent physiologic studies of denervation and reinnervation of muscle and, second, to give the results of a regimen of treatment which embodies certain principles obtained from animal experimentation.

Although this series is not large, a few facts can be deduced. The acute phase of poliomyelitis can be treated adequately by physical means without the use of hot packs. The most important part of the early treatment is the use of exercise or stretching to relieve tightness and pain. In this series, exercise and stretching by themselves relieved only a few patients. In many it was impossible to carry out the desired range of motion because of pain. Curare enabled the therapist to carry out exercise or stretching. Those patients treated with hot packs and stretching required nine to one hundred and fifty more days to overcome stiffness and pain.

(Continued on page 52)



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^{*}Nuzum, F. R.: In *Diseases of the Digestive System*, ed. by S. A. Portis, Lea & Febiger, 1944.

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Physical Medicine (Continued)

The patients with mild disease requiring only stretching were relieved in from two to ten days. The group treated by stretching, aided by curare, was relieved of stiffness and pain in from two to seventeen days, except for two patients who were not properly stretched. In one of these the stiffness was present for forty-seven days, and in the other, for six months. There is nothing in the literature to show that curare has any curative effect, and the present work supports this contention. In this series, curare was used only as an aid in carrying out the most important part of the treatment—physical therapy. Excessive doses of the drug may obliterate the resistance felt during stretching, and under these conditions stretching might result in muscle injury. Fatigue is not an important factor and does not retard recovery. The method of treatment outlined is based on physiologic concepts and is simple to execute, economical and time saving.


A NEW DEVICE FOR MEASURING MUSCLE STRENGTH: THE MYOMETER

Louis B. Newman, M.E., M.D., Chief, Physical Medicine Rehabilitation Service, Veterans Administration Hospital, Hines, Illinois. In *ARCHIVES OF PHYSICAL MEDICINE*, 30:4:234, April, 1949.

The myometer, a new device for accurately measuring muscle strength, has been described. It measures the resistance offered by a muscle in isometric contraction, the reading on the gauge being equal to the force necessary to overcome the isometric contraction of the muscle under test. It is extremely important when repeating muscle tests to use identical procedure and technic in order to assure identical conditions. Different physicians or therapists using the myometer on the same muscle or muscle groups with the same technic will secure practically identical results for the muscle strength readings.

This device is self contained, is light in weight and gives a direct reading. A maximum reading pointer eliminates the necessity of watching the gauge during the test, enabling the observer to concentrate on the muscle action. The three different ranges permit testing to be done up to a force of 60 pounds, which should adequately cover the ranges of muscles with subnormal

(Continued on page 56)



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Physical Medicine (Continued)

strength. When desired, the myometer can be held in clamp fastened to or pivoted from a table, stand or similar support.

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A COMPARATIVE STUDY OF THE TEMPERATURES PRODUCED BY MICRO-WAVE AND SHORT WAVE DIATHERMY

James W. Rae, Jr., M.D., J. F. Herrick, Ph.D., Khalil G. Wakim, M.D., Ph.D., and Frank H. Krusen, M.D., Mayo Clinic, Rochester, Minn. In ARCHIVES OF PHYSICAL MEDICINE, 30:4:199, April, 1949.

A comparison was made of the temperature produced in the tissues of trained dogs by four short wave diathermy machines and two microwave directors. Temperatures were measured by means of a thermistor and needle thermocouples and were recorded on a moving photographic film. Temperatures were determined after ten, twenty and thirty minutes of radiation.

The following observations were made:

(1) Before heating, the temperature gradient was from within outward—that is, from the warmer muscle to the less warm subcutaneous tissues and skin.

(2) After heating with microwave or short wave diathermy, this temperature gradient remained the same; from the superficial muscle layers to the skin. However, in muscles the gradient was reversed: from the warmer superficial layers to the less warm deeper layers.

(3) There was considerable variation in the temperatures produced by the different short wave generators.

(4) With the technics and dosages used in this study, the differences between the temperatures produced in the deep tissues by microwave director A and by some short wave generators were not significant.

(5) Higher temperatures were obtained after twenty minutes of heating with microwave director A and after thirty minutes of such treatment. This phenomenon was not seen when short wave generators were used.

(6) Immediately after short wave diathermy, the temperatures of the deep muscle (3 cm. in

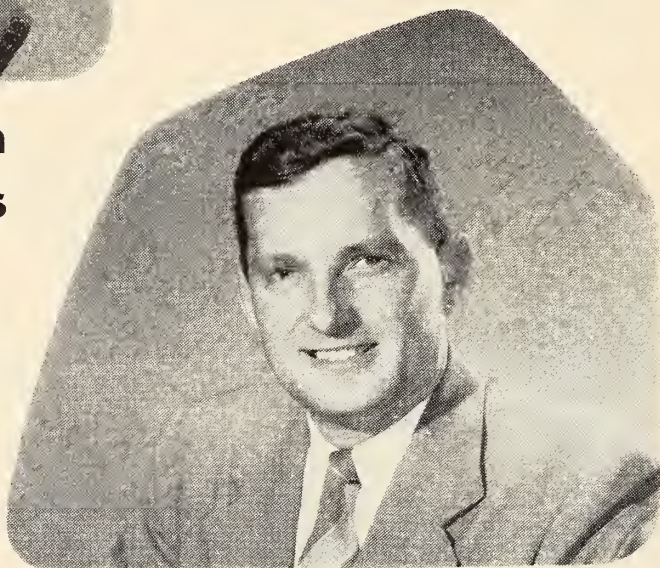
(Continued on page 58)



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Physical Medicine (Continued)

depth) rose for a variable number of minutes. This phenomenon was not observed after treatment with microwaves.

(7) The ratio of the increase of temperature in the deep muscles to that in subcutaneous tissues was higher after microwave than after short wave diathermy.

THE RESPONSE OF PSYCHONEUROTIC PATIENTS AND NORMAL MEN AND WOMEN TO BRISK SUBMAXIMAL EXERCISE

Elizabeth B. Franseen, Ph.D., Jacob E. Finesinger, M.D., and Arthur L. Watkins, M.D., Boston. In ARCHIVES OF PHYSICAL MEDICINE, 30:4:219, April, 1949.

(1) Normal healthy untrained men and women show wide variations in production of lactic acid and in respiratory, circulatory and metabolic determinations during and after three minutes of work equal to 2,079 and 1,287 Kg.-M., respectively.

(2) Psychoneurotic patients in age, build and

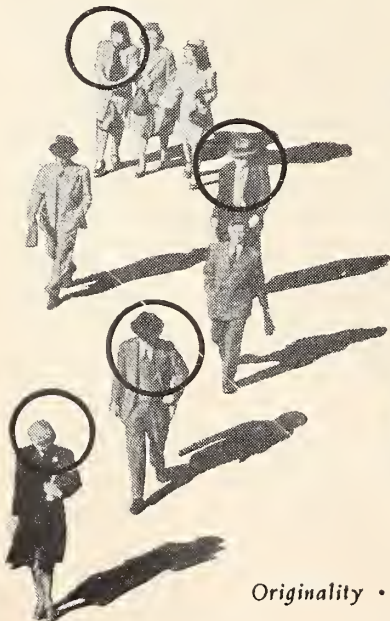
exercise history similar to the normal subjects also vary widely in the physiologic response to exercise. They demonstrate in most functions studied a greater variability about their means than do the normal subjects, and the means for the groups are essentially the same as those of the controls.

(3) During exercise and early recovery, the patients present average values for ventilation and heart rate closer to those for the normal groups than they did before the exercise.

(4) In the men the production of lactic acid appears to be quantitatively related to the ventilation coefficient ($O_2/P.V.$), whereas in the women it is more directly related to the excess amount of oxygen used during exercise and recovery and is independent of the actual pulmonary ventilation.

(5) The women, both controls and patients, showed themselves to be less fit for moderately hard activity than were the men, both controls and patients, even though their work load was less than that set for the men.

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PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, DEPARTMENT EDITOR



STUDIES OF DEEP CIRCULATORY RESPONSE TO SHORT WAVE DIATHERMY AND MICRO-WAVE DIATHERMY IN MAN

Frederic J. Kottke, M.D., Donald W. Koza, M.D., William G. Kubicek, Ph.D., and Mildred Olson, B.S., Minneapolis, Minnesota. In *ARCHIVES OF PHYSICAL MEDICINE*, 30:7:431, July 1949.

The local response to an increase of tissue temperature generally has been considered to be an increase in local circulation and metabolism. Generally with a normal vascular system the increase in circulation is greater than the increase of metabolism, resulting in better nutrition of the tissue cells and more adequate removal of metabolites. These changes are considered to be the basis for the beneficial effects of thermotherapy. It has been demonstrated that diathermy is effective in heating deep tissues of the body.

Although increases in temperature at considerable depth have been demonstrated, studies of the concomitant changes of deep circulation do not indicate that the response to deep heating necessarily corresponds to the changes accompanying superficial heating. Studies of circulatory changes in the extremities in response to heat do not always agree. Here there are two general types of tissue, skin and muscle, either or both of which may show circulatory changes. Direct heating generally increases the circulation as in-

dicated by plethysmographic studies, but the site of increase is unknown.

The circulation of the kidney has been demonstrated to respond to direct heating by long wave diathermy with vasodilatation and increased blood flow. Eppinger and his co-workers found that when electrodes were applied directly to the surface of the kidney of the anesthetized dog the blood flow would increase in proportion to the heating. Since the blood flow in the kidney can be measured by clearance technics, the opportunity is provided to study the effects of various types of heating on the deep blood flow in human subjects.

Heating with microwave diathermy had the same effect on renal circulation as heating with short wave diathermy.

It appears that there are two distinct types of response of the body to heat. Local intense heating in a circumscribed area of the surface of the body by stimulating temperature sensitive endings and increasing metabolites, causes local vasodilation and increases local circulation. Under these conditions heat is rapidly removed from the heated area and the local increase of tissue temperature is much less than it would be if there were no circulatory response. Because of the increased circulation, the superficial tissues are protected against thermal damage and there is little penetration of heat to the deeper tissues.

(Continued on page 54)

The common occurrence of mixed infections in burns and chronic wounds suggests the use of an antibacterial agent with a wide antibacterial spectrum. Furacin, effective against the majority of wound bacteria in vivo, is receiving favorable and steadily increasing mention in the literature for such conditions.* Furacin® brand of nitrofurazone, is available as Furacin Soluble Dressing (N.N.R.) and as Furacin Solution (N.N.R.) containing 0.2 per cent Furacin. These preparations are indicated for topical application in the prophylaxis or treatment of infections of wounds, second and third degree burns, cutaneous ulcers, pyodermas and skin grafts. *Literature on request.*

EATON LABORATORIES, INC., NORWICH, N. Y.

*Bigler, J.: Chicago M. Soc. Bull. 50:269, 1947 • Coakley, W. A. et al.: Plast. & Reconstruct. Surg. 3:667 (Nov.) 1948 • Curtis, L.: Surg. Clin. N. A. 1466 (Dec.) 1947 • Downing, J. et al.: J. A. M. A. 133:299, 1947 • Johnson, H.: Arch. Dermat. & Syph. 57:348, 1948 • Mays, J.: J. M. A. Georgia 36:263, 1947 • McCollough, N.: Indust. Med. 16:128, 1947 • Mills, J. et al.: Plast. & Reconstruct. Surg. 3:245, 1948 • Ryan, T.: U. S. Nav. M. Bull. 47:991, 1947 • Shipley, E. et al.: Surg., Gynec. & Obst. 84:366, 1947 • Snyder, M. et al.: Mil. Surgeon 97:380, 1945.

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The cutaneous bacterial invasion responsible for impetigo contagiosa is quickly eradicated by the specific antibiotic influence of Bacitracin Ointment-C.S.C. This unusual antibiotic inhibits the growth of many staphylococci and streptococci, producing clinical remission of the infection within a few days.

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Physical Medicine (Continued)

On the other hand, when large amounts of heat are applied to the body, the predominant reflexes are concerned with dissipation of heat from the body. Cutaneous vasodilation occurs with flushing, sweating and an increased skin temperature increasing the rate of heat loss from the body surface. To maintain the blood pressure in the face of this increased peripheral circulation cardiovascular readjustments are necessary. The pulse rate and cardiac output increase. Vasoconstriction occurs in the vascular beds not concerned with heat loss, such as the splanchnic and renal beds.

Response of the renal circulation to heating with short wave diathermy and microwave diathermy was studied in healthy young adult subjects. Heat applied to the back by both types of diathermy resulted in a significant decrease of renal plasma flow and glomerular filtration without significant changes of blood pressure. Insofar as renal blood flow may represent the deep circulation, it appears that diathermy heating causes a decrease in deep blood flow. The factors in local and systemic circulatory responses to heating are considered.

AN EXERCISE GLOVE FOR QUADRIPLEGIAS

Henry R. Shear, M.D., and A. Estin Comarr, M.D., Van Nuys, Calif. In ARCHIVES OF PHYSICAL MEDICINE, 30:7:453, July 1949.

The goal of physical rehabilitation in spinal cord injuries is the development of strength of the nonparalyzed muscle groups to such a degree that they will suffice for any compensatory action necessary for everyday activities and locomotion. The higher the spinal cord lesion, the more difficult it becomes to attain this goal. Therefore, the greatest obstacles are encountered in quadriplegics. Although there may be active motion present in the shoulder or even elbow joints, retraining of these muscle groups is difficult because of the loss of hand grip, which makes resistive exercises with bars, bells or pulleys impossible.

A glove is described which can be used by quadriplegics to facilitate exercises of the upper extremities.

An old-timer can remember when the Christmas season began on the eve of December 24th instead of on the day after Thanksgiving.

PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, DEPARTMENT EDITOR



A SIMPLIFIED METHOD FOR THE DETERMINATION OF CIRCULATING RED-CELL VOLUME WITH RADIOACTIVE PHOSPHORUS

E.B. Reeve and N. Veall. In *THE JOURNAL OF PHYSIOLOGY*, 108:1:12, March 1, 1949.

Hevesy and his colleagues developed a method for labelling red blood cells in vitro with the radioactive phosphorus isotope P_{32} , and they applied this method to the estimation of the total volume of the circulating red cells.

It seemed that this method might be considerably simplified if it were possible (a) to inject radioactive red cells without radioactive plasma and (b) to avoid the wet-ashing of packed red cells and the precipitation of phosphorus.

Experiments have therefore been carried out to establish and to test a method in which the radioactive red cells were washed free from radioactive plasma before they were injected, and in which the radioactivity measurements were carried out on liquid blood samples by means of a specially designed counter.

(1) The total red-cell volume in man is measured from the dilution of injected washed red cells, labelled in vitro with P_{32} . The red cells are prepared by incubating whole blood with P_{32} , and afterwards washed almost free of their radioactive plasma.

(2) Following injections of suspensions of

such washed red cells, P_{32} is lost very slowly from the circulation.

(3) The results given by the method agree with results given by other reliable methods. The method also has been checked in vitro.

(4) A specially designed Geiger-Muller counter taking liquid samples much simplifies the necessary manipulations of standards and samples.

(5) Apart from knowledge of radioactive technic, the method requires no great technical skill in its use.

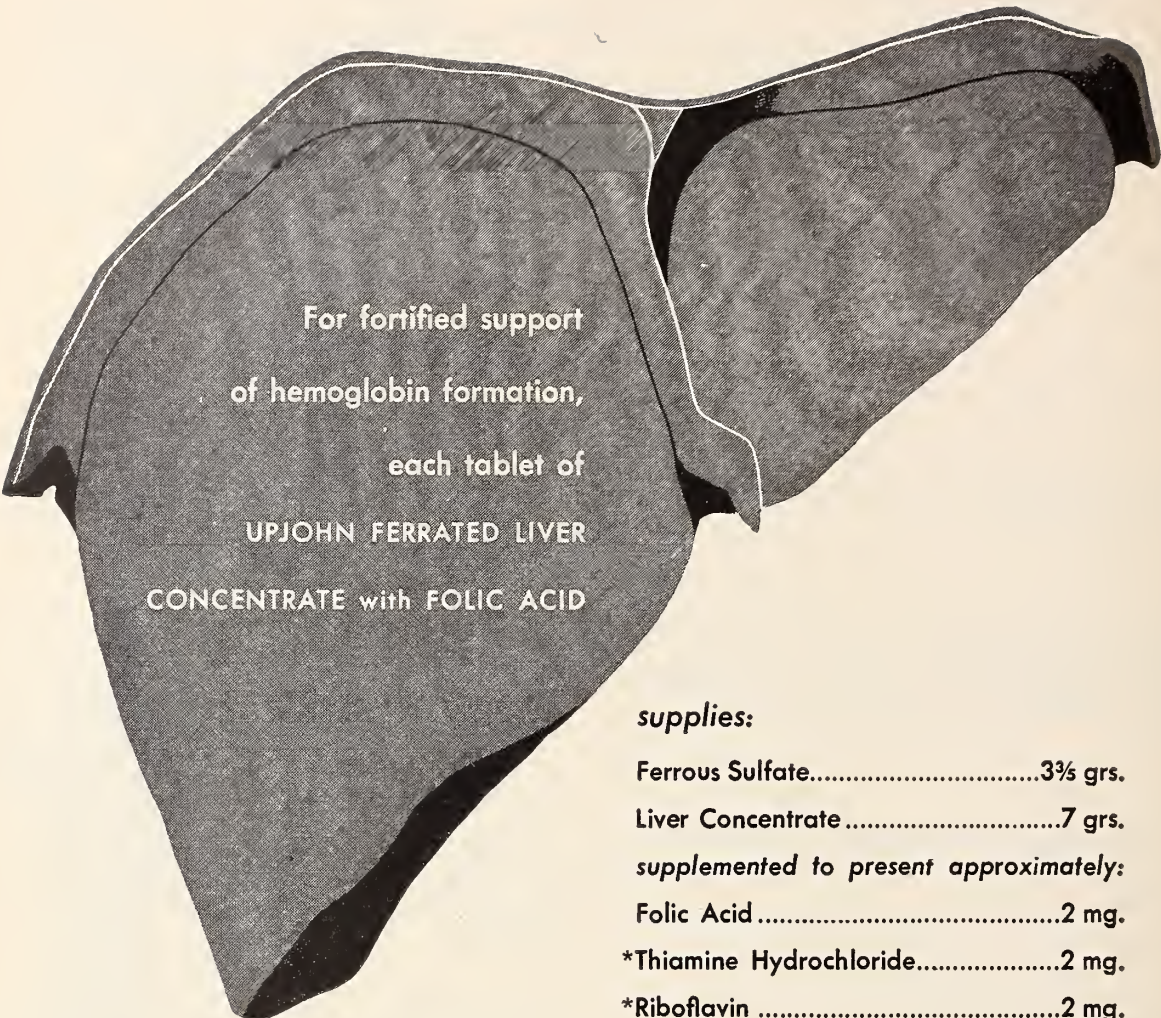
BACKACHE AND THE ORTHOPEDIC SURGEON

A. M. Rechtman, M.D., Philadelphia. In *INDUSTRIAL MEDICINE*, 18:5:203, May 1949.

Backache is a symptom, not a disease nor a diagnosis. It is so common that few people reach adult life without having had back annoyance at some time. The causes are legion; certain characteristic complaints, however, may give a clue to the possible etiological factor. Various phases of backache, as seen in the practice of the orthopedic surgeon, are discussed.

Backache, regardless of the cause, frequently becomes evident when the strain, often muscular and ligamentous, is disproportionately greater

(Continued on page 50)



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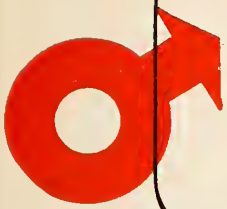
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Dieckmann, W. J. and Priddle, H. D.:
Am. J. Obst. & Gynec. 57: 541 (1949)

UNTIL recently Dieckmann has repeatedly reported that true hypochromic anemia of pregnancy did not respond satisfactorily to orally administered iron.^{1,2}

Now, however, following his latest investigation—a study of the value of molybdenized ferrous sulfate (Mol-Iron)—he states:

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" . . . a true example of potentiation of the therapeutic action of iron . . . "⁵

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1. Adair, F. L., Dieckmann, W. J., and Grant, K.: Am. J. Obst. & Gynec. 32:560 (1936).
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References

1. American Committee for the Control of Rheumatism, Pemberton, R.: *Rev. Gastroenterol.*, 9:91, 1942.
2. Spackman, E. W. et al: *Am. J. M. Sci.*, 202:68, 1941.

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Physical Medicine (Continued)

than the strength or the ability of the part to compensate.

An attempt has been made to discuss the symptom of backache in a practical manner. Most patients respond favorably to palliative treatment, regardless of the duration of symptoms, providing irreparable damage has not occurred. With careful analysis and palliative occur. If the posture is poor, recurrence is corrected. A single episode of backache may more likely, but the severity and frequency of the episode may be lessened by intelligent and intensive treatment. Surgery is necessary in a relatively small percentage of cases.

Some surgical indications were mentioned, but surgical procedures were not discussed in this presentation. Despite the so-called advances presented in the literature, there are still some patients who respond very slowly and poorly to the best that medicine has to offer. This indicates that there is still much to be learned regarding the etiology and treatment of backache.

CHANGES IN JOINT TEMPERATURE PRODUCED BY DISEASES AND BY PHYSICAL THERAPY: PRELIMINARY REPORT

Joseph L. Hollander, M.D., and Steven M. Horvath, Ph.D. Philadelphia, Pa. In *ARCHIVES OF PHYSICAL MEDICINE*, 30:7:437, July 1949.

A relatively simple method of obtaining intra-articular temperatures has been devised as a means of determining the effect of various modalities of physical therapy on the joint and perhaps also for determining the amount of synovial hyperemia from a disease process. Increased heat in a joint after exercise may be an indication of the amount of cartilaginous degeneration present within the joint. Sub-normal temperatures within a joint as compared with the skin temperature may be indicative of decreased circulation of the synovial membrane.

Forty-two determinations of the internal temperature of the knee joint and the overlying skin surface have been obtained on 35 persons.

A variety of physical measures were employed to modify the joint temperature. Simple passive and nonweight-bearing active movement of the joint was performed in instances.

Fever therapy, induced by a pyrogen injected

(Continued on page 56)

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Physical Medicine (Continued)

intravenously, resulted in increased joint and surface temperatures.

Application of an infra-red heat source (baker) over the lower extremities for periods of thirty minutes results in slightly elevated joint temperatures.

Short wave diathermy (induction method, three turns of the coil around the joint), in patients who were able to tolerate this mode of therapy, produced elevated temperatures. The surface temperatures were elevated to a greater extent than the deep temperatures. A microwave diathermy apparatus was employed in 9 patients. There was a greater elevation of the internal temperature than of the surface temperature, confirming the previous observations of Horvath and co-workers on the heating of muscular tissues.

Observations were made on the influence of hot and cold packs on both normal and inflamed joints. The application of hot packs invariably resulted in a depression of the intra-articular temperature as much as 2.2 degrees F. Continued reapplication of these hot packs produced steadily diminishing effects, but even after the tenth pack of a series the joint temperature was still definitely lowered. The internal temperature quickly returned to control levels after discontinuation, and five to ten minutes later the values were slightly higher — a positive reflex effect. Cold packs, on the other hand, increased joint temperatures to a corresponding degree. A reflex effect in the same direction was observed in the opposite knee joint in 1 patient so studied (i.e., depression of internal joint temperature with heat and elevation with external cold to the opposite knee). The effects of this mode of physical therapy on joint temperature were not so marked in the summer as in the winter.

Application of paraffin to the extremities caused a sharp rise of skin temperature over the joint with a delayed but marked rise in the temperature inside the joint. The effects of hydrotherapy on joint temperature were not pronounced, even though the skin temperature was increased rather definitely.

Studies are being carried out on the effect of exercise, particularly weight-bearing exercise, on the temperature within the joint. The rate of

(Continued on page 58)

announcing another Robins' achievement

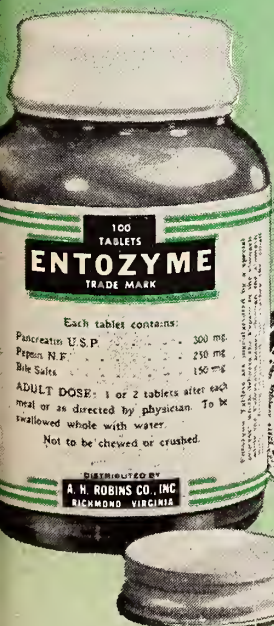
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REFERENCES: 1. McGavack, T. H. and Klotz, S. D.: Bull. Flower Fifth Ave. Hosp., 9:61, 1946.
2. Weissberg, J., McGavack, T. H. and Boyd, Linn J.: Am. J. Digest. Dis., 15:332, 1948.

*A coined word to describe the unique mechanical action of Entozyme Tablet—whereby pepsin is released only in the stomach, and pancreatin and bile salts only in the small intestine.

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ENTOZYME



Physical Medicine (Continued)

cooling on rest following activity may shed some light on the clinical phenomenon of the "friction effect" and "articular jelling" so commonly found in degenerative joint disease.

Classification of heating modalities by their effect on joint temperature is now possible. This method of determining temperatures also may prove to be a means of measuring the efficiency of circulation in the synovial membrane. It has not yet been shown that raising the joint temperature in treating arthritis is necessarily beneficial; in fact, in cases of active arthritis the forms of physical therapy which raise the temperature most (i.e., short wave diathermy, microwave and paraffin applications) clinically appear to aggravate pain in the acutely involved joints. It is interesting that cold, pain, fear and even smoking all lower the skin temperature and raise the joint temperature appreciably. Reevaluations of modalities of physical therapy chosen for treatment in rheumatoid arthritis should be made with the actual reaction of the joint in mind rather on purely surface

temperature changes, since it has been observed in this work that the changes in joint circulation do not parallel those in skin but frequently are directly opposite.

VALUE OF EARLY RECOGNITION AND EARLY THERAPY IN CEREBRAL PALSY

Margaret Watkins. In JOURNAL OF AMERICAN MEDICAL WOMEN'S ASSOCIATION. February 1949.

According to Watkins cerebral palsy is widespread, for each year there are born 7 per hundred thousand population. Of these 7, 1 will die in infancy and 2 will be feeble-minded, leaving 4 who are treatable or educable. Of these 4, the condition of 1 will be severe, of 2 moderate and of 1 mild. The physician should see that the children with this condition are directed to a center where they can be given the proper therapy, the proper education and instruction. It should be remembered that because of impairment of the neuromuscular system these children

(Continued on page 60)



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Downing, J. et al.: J. A. M. A. 133:299, 1947 • Johnson, H.: Arch. Dermat. & Syph. 57:348, 1948 • Miller, J. et al.: New York State J. Med. 47:2316, 1947 • Miller, R. et al.: North Carolina M. J. 9:574, 1948 • Shipley, E. et al., Surg., Gynec. & Obst. 84:366, 1947.



Physical Medicine (Continued)

do not do automatically those things which they should do, but can be taught a different type of muscle control by early training in good patterns of behavior before bad habits are established. The treatment is a combination of physical therapy, occupational therapy and speech therapy. As soon as cerebral palsy is recognized the baby should be started on conditioned exercises. The parents are taught exercises to be given while a simple rhyme is sung; in her words, conditioned response based on Pavlov's experiments. Through constant repetition of the rhyme and the exercise, passive motion is changed to active assisted motion and finally to active motion. The exercises are designed to teach reciprocation of the legs and reach and grasp of the arms and hands.

Phthisiologists have long agreed that the diagnosis of tuberculosis must rest upon the laboratory demonstration of tubercle bacilli in tuberculous suspects. Francis J. Weber, M.D., Pub. Health Rep., Oct. 1, 1948.

THE EFFECT OF POSTURAL AND EXERCISE COMPONENTS ON THE HEART RATE DURING A BRIEF STEP TEST

J. A. C. Knox. In THE JOURNAL OF PHYSIOLOGY, 108:3:340, May 15, 1949.

When a brief step test is performed, beginning and ending in the sitting posture, there are two factors which may affect the heart rate: (a) the postural component, due to the change of posture from sitting to standing; and (b) the exercise component, due to the actual stepping.

By recording the heart beats electrically during exercise it is shown that each of these factors does influence the heart rate and that their effects can be separated but are additive in the mixed exercise. A fall in heart rate observed during the step test is due to the partial regression of the postural component.

BCG vaccine has joined the conventional forms of tuberculosis control in Alaska. With a tuberculosis mortality rate nine times that of the United States, the last outpost of America is mustering every known weapon in its fight against tuberculosis. Elaine Schwinge, M.D., Nat. Tuberc. A. Bull., May, 1949.

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1. Levin, L.; Kelly, J. F., and Schwartz, E.: New York State J. Med. 48: 1474 (1948).

PHYSICAL MEDICINE ABSTRACTS

JOHN S. COULTER, DEPARTMENT EDITOR



THE PREVENTION OF POSTURAL DEFORMITY AFTER THORACOPLASTY

Bert A. Treister, M.D., Chief, Physical Medicine Rehabilitation Service, Veterans Administration Hospital, Brecksville, Ohio. In *ARCHIVES OF PHYSICAL MEDICINE*. 30:7:446, July 1949.

Thoracoplasty is the most efficient means of effecting permanent collapse of the lung in advanced pulmonary tuberculosis with cavity. This operation, usually carried out in multiple stages, entails the removal of several ribs and their adjacent transverse processes on one side of the chest. The removal of these bones detaches important muscular structures from their normal sites of insertion, thus disturbing their function in maintaining normal lateral stability of the spine. The imbalance thus produced initiates the development of a marked postural deformity, which, if unchecked by treatment, grows progressively worse.

My purpose in instituting a posture program at this Veterans Administration Hospital was to attempt to prevent or minimize the marked postural deformity that follows thoracoplasty. This program was prompted by the numerous complaints registered by patients who, having had the operation elsewhere, were admitted here because of recurrent disease. Their deformities usually were severe. They complained of pain in the chest, limited range of motion in the shoulder, awkward appearance and difficulty with wearing clothing. Since marked postural

deformity creates social and vocational handicaps superimposed upon those created by tuberculosis, it is apparent that it is necessary, wherever possible, to minimize such deformity.

It is generally recognized that good posture is associated with good health and poor posture with poor health. The maintenance of good posture depends upon several factors, one among which is habit. Unnatural postural attitudes assumed for long periods, day in and day out, whether while standing, sitting or lying down, may lead to abnormalities which later become permanent. This results, perhaps, from the development of conditioned reflexes, the postural muscles becoming conditioned to the abnormal attitude. Another factor in poor posture can be muscular imbalance. This probably is the major cause of the deformity in posture occurring after thoracoplasty.

The posture program in this hospital is divided into two phases. The first of these deals with all patients; the second, with those having thoracoplasty. In the early stages of treatment patients spend many long weeks at complete bed rest. They often lie in bed with one or more pillows causing constant forward flexion of the head. When such a patient becomes ambulatory, he may become conditioned to this postural attitude and demonstrate a round shouldered posture. Prolonged reclining on a

(Continued on page 40)

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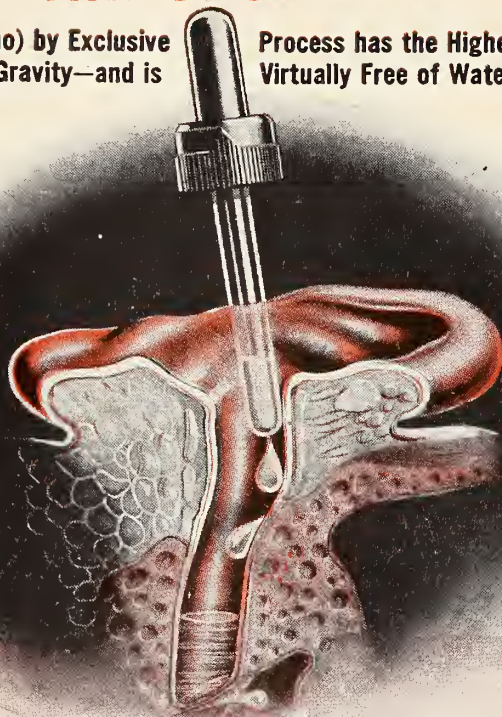
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Physical Medicine (Continued)

soft bed in the supine position leads to strain of the lumbar muscles. To prevent postural abnormalities in such patients, they are instructed to lie flat in bed without pillows during the organized rest periods each day. To insure further relaxation, the knees can be flexed and the patient's pillow placed under the knees. A rolled-up towel under the lumbar curve relieves this strain.

When the patient becomes ambulatory, his standing posture is analyzed and abnormalities detected by the physical therapist. Advice for correction is given. During his entire hospitalization, the patient is reminded of the importance of posture. Large posture mirrors are located on all floors opposite the patient elevators. These carry posters with hints on how to attain good posture. Posture mirrors also are located in all patient lavatories and shower rooms.

The second phase of the posture program deals with the prevention of postural deformities after thoracoplasty. Review of the early postoperative films of those patients admitted with already marked deformities of the spine reveals that the deformity begins to develop within a few days after the removal of the first two or three ribs in the first stage of the operation. Therefore, measures employed to prevent deformity must be instituted early. That early tendency to deformity may be prevented can be demonstrated roentgenologically.

A procedure to prevent postural deformity after thoracoplasty must take into consideration the importance of rest in the treatment of the underlying disease. Hence, passive measures are preferable, for the most part, to minimize exertion on the part of the patient.

The patient who is to have a thoracoplasty is visited by the physical therapist preoperatively. She orients him as to the importance and aims of the procedure. He is advised to develop the "feel" of a straight spine while lying on his back in bed and assisted in assuming the position correctly. In general, he should lie on his back postoperatively for as long a period as is consistent with his comfort. To counteract the tendency to lateral flexion in the cervicothoracic region toward the unoperated side, he is instructed to keep these flexors stretched by approximating the ear on the operated side to

the shoulder on the same side. He routinely assumes this position while lying on his back, for two hours in the morning and two hours in the afternoon and as often in between time as is compatible with his comfort. To supplement these measures and also to prevent adaptive shortening of the elevators of the shoulder on the operated side, he is instructed to make voluntary attempts frequently to depress this shoulder directly downward.

Two or three days postoperatively, depending upon the patient's general condition, passive movement of the shoulder, especially in abduction, is carried out daily. This, after a few days, is followed by active movement.

REHABILITATION OF THE CHRONIC MEDICALLY ILL

Otto Eisert, M.D., Chief, Physical Medicine Rehabilitation Service, Manhattan Beach Veterans Hospital, Brooklyn. In *ARCHIVES OF PHYSICAL MEDICINE*, 30:7:441, July 1949.

From this study it can be seen that over 90 per cent of these patients with chronic medical conditions were rehabilitated, at least to the extent that the amount of required attendant and nursing care was greatly reduced and ultimately to the point that most of them could go home. In this series, 64 per cent were discharged from the hospital. In the past, the patients' families were frequently informed that the prognosis was hopeless and that the patients had become more or less custodial problems. Little or no treatment was instituted, and this led to increasing apathy, loss of morale and lack of desire on the part of the patients to improve. Frequently their limbs became fixed in useless positions, and bed sores developed. With the physical medicine rehabilitation program, this situation was changed to the extent that the wards became cheerful, the patients became more interested in life and the morale of the medical staff improved. The families were invariably delighted at the patients' improvement and subsequent discharge from the hospital.

In this connection, it appears, that, in addition to the physical medicine rehabilitation program for inpatients, a good outpatient program is necessary to provide for continuity of treatment

(Continued on page 44)

NEW METHOD FOR RELIEF OF ALLERGIC NASAL CONGESTION

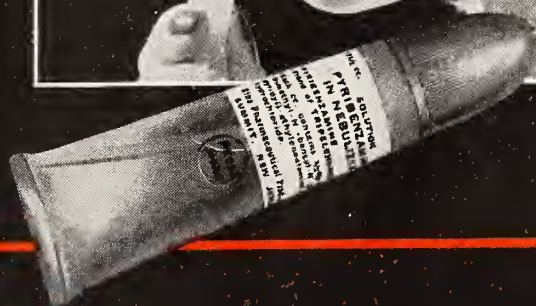
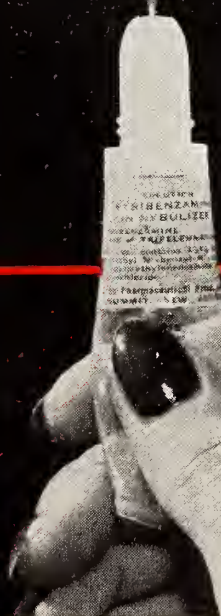
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Physical Medicine (Continued)

following discharge. With such a program many patients who in the past had to remain in the hospital would be enabled to go home much earlier. Transportation should be provided to facilitate treatment in the outpatient department.

Common sense, ingenuity and perseverance are necessary in the treatment of patients with chronic conditions. The physician in charge must at all times maintain an attitude of optimism, which will, in turn, be communicated to the patients. Each case presents individual problems. In one case, a patient with bilateral cerebral thrombosis, who had been bedridden for many years, received the necessary amount of muscle reeducation and strengthening but was unable to stand because of a marked tendency to fall backward. This was counteracted by increasing the height of his heels, so that the center gravity was shifted forward. Later, when the patient acquired good equilibrium and muscular control, the heels were lowered gradually until they were of normal height.

A group of trained therapists working under the direction of the physiatrist is extremely essential. There must be close collaboration among the various members of the group. Each patient must be treated individually. It is the details in diagnosis, details in medical and surgical care and details involved in the physical medicine rehabilitation program which are essential to produce the best ultimate results. Finally, rehabilitation of patients with chronic conditions should be undertaken without consideration of the length of their previous hospitalizations or the ultimate prognosis of the disease.

SUMMARY

1. Rehabilitation is of primary benefit to patients with chronic medical diseases, as indicated by improvement of 90.9 per cent of the patients in a series of 128 and discharge of 74 per cent.
2. Nursing and attendant care is reduced, and hospital beds may be released for other patients.
3. Patients can take care of themselves for the remaining years of their lives and reacquire a certain amount of independence.
4. The families, in turn, feel that the patients

(Continued on page 46)



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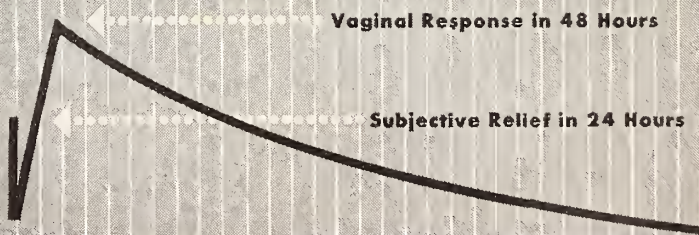
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FREEDOM FROM SUBJECTIVE SYMPTOMS FOR APPROXIMATELY A MONTH

Physical Medicine (Continued)

are not necessarily hopeless invalids and welcome their improvement.

CONTRIBUTION TO THE REHABILITATION OF QUADRIPLÉGIC PATIENTS

Fritz Friedland, M.D., Andrew P. Owens and Joseph G. Cabo, Framingham, Mass. In ARCHIVES OF PHYSICAL MEDICINE, 30:7:450, July 1949.

During recent years a great number of special devices have been developed to permit or increase the usefulness of paralyzed hands, so to enable patients to enjoy greater independence in their activities. Most of these are devices designed for routine activities of daily life, such as holders for eating utensils, cigarets and tooth brushes; some may increase the earning power of the paralyzed, such as appliances for typing; some are modifications of tools and equipment designed for therapeutic purposes, allowing the patient to partake in occupational therapy at a time when his hands are too weak to use ordinary

tools; other devices, such as automobile-driving appliances, may even be objectionable, since they permit the severely paralyzed to perform an activity which, though enjoyable, may be dangerous to him and others.

The vocational choices of quadriplegic patients are very limited. Photography could be one of the few feasible ones provided that the patient has some use of his arms; partial use of the fingers would be an added asset. There are limitations to the type of photographic work that a person with quadriplegia can do; portrait work seems most suitable. Some finger function is necessary for darkroom work. In the case to be reported the patient was interested in studying photography on a vocational basis, but because of his disability he was unable to hold and manipulate a standard camera used for professional photography. To meet his need, a wheelchair camera mount was designed and constructed by the patient and his manual arts therapist.

(Continued on page 48)

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1. Levin, L.; Kelly, J. F., and Schwartz, E.: New York State J. Med. 48: 1474 (1948).



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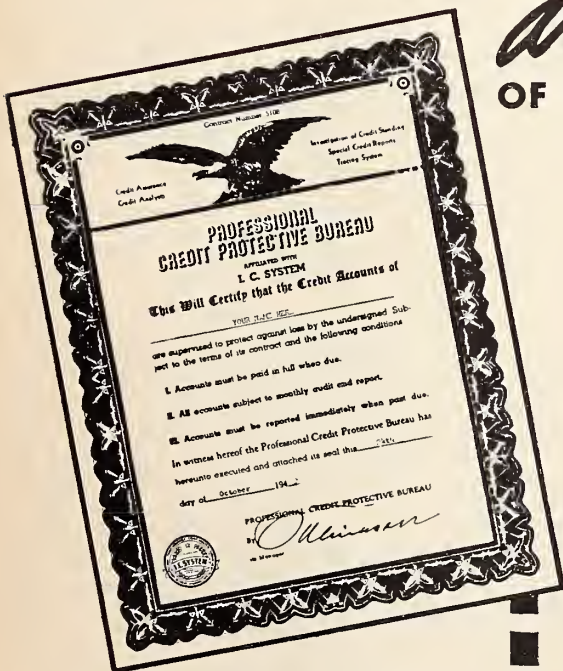
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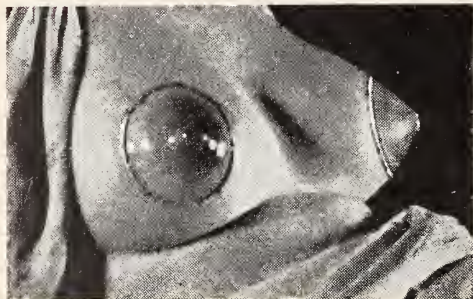
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Bibliography on use of breast shields

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2. McKenzie, C. H.: The Use of Plastic Nipple Shields for the Lactating Breast, Journal-Lancet, 68:199 (May) 1948.
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4. Thomas, E. C.: The Prevention of Mastitis: the nursing problem, Edinburgh M. J. 54:456-441, 1947.
5. DeLee, J. B.: Principles and Practice of Obstetrics, W. B. Saunders Co., Phila., 1938.

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Physical Medicine (Continued)

SUMMARY

Wheelchair camera mount is described and illustrated; it is designed for use of quadriplegic patients who desire to engage in photography as a vocation or hobby.

THE MEDICAL TREATMENT OF CEREBROVES- CULAR ACCIDENTS

Frank K. Sewell, M. D. In KENTUCKY MEDICAL JOURNAL, 47:7:265, July 1949.

A great deal of the prognosis depends upon the patient. The better he has been able to adjust in the past the better the prognosis will be. The majority of patients will survive the stroke. Strokes occurring during sleep usually improve rapidly. Paralysis mostly sensory are more likely to result in a useless limb. The lower extremities return to function better than the upper. Paralysis with stereognosis preserved is a good omen. If pain appears it will persist and grow. If there is a hemiopsia with the paralysis, defects are likely to be severe. In general the higher the lesion the more grave the prognosis. To the patient the physician should be optimistic for many recover completely and are able to resume work. These old people have a fear of being a nuisance around the house and a little overly optimistic encouragement often surprises the physician in its results.

Absolute bedrest is essential. The patient should be turned frequently to prevent hypostasis, postural drainage with aspiration of mucus is important. Well-meaning friends and neighbors should be excluded. The patient's questions should be answered as soothingly as possible. Gentle massage of the limbs with passive motion of the joints should be carried out as soon as the patient regains consciousness.

As soon as voluntary motion returns the patients should be put through systematic exercise several times each day; warm baths, diathermy and massage may help. The length of time he is kept in bed depends upon the severity of the attack. Recovery will not be complete for about one year. During this time the patient must be reeducated in a way of life suitable to his individual capacities.

It is important to differentiate between thrombosis, hemorrhage, and embolism in order that the most satisfactory treatment may be followed.

(Continued on page 50)

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Physical Medicine (Continued)

The important periods in treating cerebral accidents are:

(1) The stage of shock. The disease is yet advancing and the end is not in sight. During this period treat shock.

(2) The period when the patient reacts and realizes the extent of his injury. Psychotherapy is invaluable at this stage.

(3) The period of recovery during which supportive psychotherapy must be given.

One of the most important recent advances patient's voluntary action. Such manipulation in geriatric medicine is the recognition of the condition of multiple small strokes.

MANAGEMENT OF POST-OPERATIVE PULMONARY COMPLICATIONS

In THE MANITOBA MEDICAL REVIEW, 29:5:273, May 1949.

Of all the complications that beset the surgeon, those involving the lungs are among the most common. These complications, marking their reduction by better preoperative preparation have led to more intelligent efforts in

tion, improvement in anesthetics and their administration, meticulous care in the execution of operative trauma and close attention to the patient throughout the convalescent period.

The sensible approach to pulmonary embolism is prevention of phlebothrombosis. This may be accomplished through (1) early rising, (2) by exercise, (3) Trendelenburg position to accelerate venous return from the extremities (4) anticoagulants, (5) prevention and correction of dehydration and circulatory collapse and (6) deep breathing to increase negative thoracic pressure and hence favor the movement of venous blood.

CHRONIC AND UNEXPLAINED EDEMA

A. G. W. Whitfield and W. Melville Arnott. In THE LANCET, No. 6571, p. 225, August 6, 1949.

We have little that is constructive to offer for the treatment of these cases. Elastic stockings and sleeping with the foot of the bed raised usually produces slight improvement. Massage the difference between success and failure of an seems to have so little effect that it is not worth the time and effort that it involves.

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